

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2019-326-E - ORDER NO. 2022-359
MAY 13, 2022

IN RE: South Carolina Energy Freedom Act (House)	ORDER APPROVING
Bill 3659) Proceeding to Address S.C. Code)	DOMINION ENERGY
Ann. Section 58-27-460(A)(1) and S.C. Code)	SOUTH CAROLINA,
Ann. Section 58-27-460(A)(2) (Promulgation)	INC.'S APPENDIX DESC
and Periodic Review of Standards for)	CS TO THE SOUTH
Interconnection and Parallel Operation of)	CAROLINA GENERATOR
Generating Facilities to an Electrical Utility's)	INTERCONNECTION
Distribution and Transmission System))	PROCEDURES

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (“the Commission”) for consideration of the application of Dominion Energy South Carolina, Inc. (DESC) for approval of Appendix DESC CS¹ to the South Carolina Generator Interconnection Procedures (SCGIP). The application seeks authorization to transition DESC’s Generator Interconnection Study Process from a Serial Study Process to a Cluster Study Process (Definitive Interconnection Study Process or DISP) and to approve the new DESC-specific Appendix DESC CS to the SCGIP (Appendix DESC CS or DESC Proposal),² which DESC will use to administer the Definitive Interconnection Study Process. There are no objections to DESC’s request. In support of its Petition, DESC states

¹ It is noted that DESC’s cover letter to the Application refers to DESC SC and to DESC CS, but the Application and Exhibit 1 refer to DESC CS. The Commission Directive also refers to DESC SC, but is intended to mean DESC CS. All references to the DESC SC or to DESC CS shall mean DESC CS.

² See Exhibit 1 to the DESC Application for Approval of the Appendix DESC CS filed January 12, 2022.

several points, which are outlined below in this Order. For the reasons stated herein, the Commission approves DESC's Application for the DESC Proposal³ and for DESC to transition from the serial study process to the cluster study process.

II. PROCEDURAL HISTORY

On October 10, 2019, Commission Staff opened this docket to address the interconnection-related directives contained in Act 62 (Act No. 62, 2019 S.C. Acts 368).⁴ On July 23, 2020, the Clerk issued a Notice of Hearing and Prefile Testimony Deadlines as well as the Prefile Testimony Letter setting out a procedural schedule for this docket, requiring pre-filed testimony to commence on October 15, 2020.

By letter dated September 15, 2020, DESC, Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, the South Carolina Solar Business Alliance, and Southern Current, LLC, (collectively, the Interested Parties) requested that the Commission address Act 62's requirements contained in S.C. Code Ann. § 58-27-460(A) in two phases and requested that the Commission hold in abeyance all deadlines, both the prefiled testimony and hearing procedural schedule. In the first phase, the parties proposed that "the Commission would consider proposed revisions to the [SCGIP] to establish an alternative process for studying certain large generators requesting interconnection."⁵ The parties further proposed that the "second phase of work would involve comprehensive revisions to the other portions of the SCGIP not implicated by the Duke Queue Reform Proposal, and

³ *Id.*

⁴ Order No. 2019-728.

⁵ Request of Duke Energy Carolinas, LLC, Duke Energy Carolinas Progress, LLC, DESC, the South Carolina Solar Business Alliance (SBA), and Southern Current, LLC, dated September 15, 2020, p. 2.

would be proposed by the Duke Utilities, DESC, the Solar Intervenors, and potentially other interested parties, after a series of stakeholder meetings intended to seek consensus on proposed reforms.”⁶ On October 1, 2020, the Commission approved this two-phased approach and directed the Clerk’s Office of the Commission to hold all deadlines in abeyance for this Docket.⁷

On November 17, 2020, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (collectively, the Duke Companies) filed an application for approval of jointly supported limited enabling revisions to the SCGIP and approval of the Duke Energy Appendix. That same day, DESC submitted a letter to the Commission that expressed DESC’s support for the revisions proposed by the Duke Companies, while noting that “DESC anticipates filing a proposal for a DESC-specific cluster-study process at a later date as part of the phased approach approved by the Commission in this docket.”⁸

On June 18, 2021, the Commission approved the Duke Companies’ revisions to the SCGIP, allowing the Duke Companies to implement an alternative cluster study interconnection process.⁹ The Commission also authorized the Duke Companies’ request to transition their South Carolina generator interconnection process to a Definitive Interconnection Study Process—similar to DESC’s request in this proceeding— pursuant to the Duke Energy Appendix.¹⁰ The Commission’s approval of the enabling revisions to the SCGIP for DEC and DEP allowed DESC to continue to process Interconnection

⁶ *Id.*

⁷ Order No. 2020-660.

⁸ DESC Letter dated November 17, 2020.

⁹ Order No. 2021-439.

¹⁰ *Id.*

Requests under a serial study process and provided DESC flexibility to evaluate whether to transition to a Cluster Study Appendix (subject to the Commission's review and approval) in the future pursuant to Section 1.1.1.3 of the SCGIP.¹¹

DESC filed this Application for approval of Appendix DESC CS (Application), on January 12, 2022, which is a DESC-specific cluster-study approach to studying and processing generator interconnection requests. DESC states that:

DESC's proposed Appendix DESC CS represents a coordinated effort by DESC to reform its interconnection study process both at the federal and state level. Specifically, the Federal Energy Regulatory Commission has approved corresponding revisions to Attachment M to DESC's Open Access Transmission Tariff containing its Large Generator Interconnection Procedures and Standard Large Generator Interconnection Agreement. These modifications, along with the Appendix DESC CS proposed in this proceeding, will enable DESC's transition from a serial study generator interconnection approach to a cluster study generator interconnection approach. Finally, DESC's proposal is the product of significant stakeholder interaction and is substantially similar to Duke Energy Carolinas, LLC's ("DEC") and Duke Energy Progress, LLC's ("DEP") cluster-study approach, which was approved by the Commission on June 18, 2021.¹²

On February 8, 2022, the Office of Regulatory Staff (ORS) filed a letter in Docket No. 2019-326-E concerning its comments on the DESC's Proposal. ORS states that:

.... [a]ccording to the Company's Application, this proposal will enable DESC's transition from a serial study generator

¹¹ Order No. 2016-191, Order Exhibit 1, p. 5.

1.1.1.3

A request to interconnect a Generating Facility larger than the capacity stated in Section 3.1, or a Generating Facility that does not qualify for or pass the Fast Track Process or qualify for the 20 kW Inverter Process, in maximum rated capacity shall be evaluated under the Section 4 Study Process.

¹² DESC Letter dated January 12, 2022, pp. 1-2.

interconnection approach to a cluster study generator interconnection approach and is substantively similar to the Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's cluster-study approach, which was approved by the Commission in Order No. 2021-439 on June 18, 2021.

ORS does not object to the Company's request provided the processes continue to support the provision of safe and reliable service and results in timely and non-discriminatory processing of the SCGIP. Should the Commission approve the Company's Application, ORS recommends that DESC strictly enforce the SCGIP, with its proposed modifications, and enforce the process and timelines as proposed.¹³

On February 9, 2022, the Carolinas Clean Energy Business Association (CCEBA) filed its comments concerning DESC's Proposal. CCEBA provides its support for the DESC Proposal. CCEBA further stated that CCEBA's recommendations were considered by DESC and incorporated into DESC's Proposal as follows:

... CCEBA participated, on behalf of its members, in the stakeholder input process leading up to the filing of DESC's proposal. CCEBA appreciates that DESC took CCEBA's recommendations and comments into account and made changes to its draft proposals based on those comments. CCEBA encourages DESC to take similar steps in future dockets to provide such opportunity for stakeholder involvement.

CCEBA has reviewed the filing and supports DESC's Appendix as filed. . . .¹⁴

III. ANALYSIS AND DISCUSSION

DESC's state interconnection queue is administered pursuant to the SCGIP, which was initially approved by the Commission on April 26, 2016, with Order No. 2016-191 in

¹³ ORS Letter dated February 8, 2022, p. 2.

¹⁴ CCEBA letter dated February 9, 2022.

Docket No. 2015-362-E. These are “the standards promulgated for interconnection of renewable energy facilities and other nonutility-owned generation with a generation capacity of 2,000 kilowatts (“kW”), measured in alternating current (“AC”), or less to an electrical utility’s distribution system. S.C. Code Ann. § 58-27-460(A).”¹⁵ The SCGIP is designed to apply to all South Carolina jurisdictional interconnections, as well as to apply to any parallel non-utility generator requesting to interconnect to a South Carolina utility’s system and to either net meter or sell its full output to the interconnecting utility.¹⁶ The purpose is to provide transparency and certainty to interconnection customers and utilities regarding standards and procedures applicable to connecting generating facilities to the utilities’ electric grid.¹⁷

SCGIP regulates DESC’s process for studying Interconnection Requests submitted by South Carolina Interconnection Customers subject to the Commission’s jurisdiction, including qualifying facilities (“QFs”) under the Public Utility Regulatory Policies Act of 1978 (“PURPA”). DESC is required to publish updated South Carolina interconnection queue information on its website on a monthly basis and must file semi-annual reports with the Commission and the ORS on or before February 1 and August 1 each year for the prior six-month period ending December 31 and June 30, respectively.

DESC is a public utility engaged in the generation, transmission, distribution, and sale of electricity to retail and wholesale customers. DESC operates an integrated electric utility system that serves approximately 760,000 customers in 24 counties in central,

¹⁵ Order No. 2016-191, p. 1.

¹⁶ *Id.*, pp. 5-6.

¹⁷ *Id.*, p. 6.

southern, and southwestern South Carolina. DESC's service territory covers nearly 16,000 square miles in South Carolina, including the metropolitan areas of Charleston, Columbia, Beaufort, and Aiken, and it also includes many other smaller cities, towns, and rural areas in South Carolina.¹⁸

DESC initiated a stakeholder process with the use of a consultant to explore potential solutions under the current serial process and review any efficiencies that could be gained by through other processes than the serial study.¹⁹ DESC invited participation from a wide range of its stakeholders, including interconnection Customers in DESC's Queues, owners of active generation facilities with more than 20 kW of Maximum Generating Capacity, intervenors in the Commission's proceeding considering modifications to the SCGIP, transmission customers under DESC's Open Access Transmission Tariff (OATT), and other South Carolina utilities and trade groups. DESC convened three separate stakeholder meetings on February 10, 2021, April 15, 2021, and April 29, 2021.²⁰ From these stakeholder meetings, DESC asserts that it "achieved significant stakeholder consensus regarding the implementation and administration of the proposed cluster-study process, all of which is outlined in the DESC Proposal."²¹

In 2014, the General Assembly passed Act 236, which spurred investment in solar generation by mandating solar procurement through a distributed energy resources program. Act 236 also required the Commission to promulgate interconnection processes

¹⁸ Application, pp. 5-6.

¹⁹ *Id.* at p. 4.

²⁰ The presentations from these stakeholder meetings are attached as Exhibits 2, 3, and 4 to DESC's Application for Approval of the Appendix DESC CS filed January 12, 2022.

²¹ Application, p. 5.

for state-jurisdictional QFs. Next, the passage of Act 62 in 2019 expanded the opportunities for the investment in solar generation and renewable energy. DESC asserts that such legislative enactments have added substantial amounts of QF solar and that DESC:

has received a flood of interconnection requests in recent years. For example, in the summer of 2019, the nameplate capacity of utility-scale solar generation on the DESC system was approximately 498 MW. For the summer of 2020, the nameplate capacity of utility-scale solar generation on the DESC system was approximately 863 MW—an almost 75% increase year-over-year. As of June 2021, DESC had over 1,000 MW of solar photovoltaic generation systems comprised of residential, commercial, utility-scale, and community solar. In total, there are 124 projects in DESC’s interconnection queues (complete and in-process projects) exceeding 7,837 MW of aggregate capacity on the DESC system, which has an all-time historical peak load of 4,970 MW.²²

DESC further asserts that the growth in the number of requests, not just the projects achieving commercial operation, is more remarkable. “From early 2014, through June 30, 2021, DESC received 585 total interconnection requests—many of which never achieved commercial operation—in DESC’s Queues for generation projects equaling approximately 12,883 MW.”²³ DESC asserts that this results in multiple projects never reaching commercial operation for every one project added to the DESC system, which must be studied and processed in accordance with the SCGIP like the projects achieving commercial operation.

²² Application, p. 6.

²³ *Id.*, p. 7.

DESC claims that it is limited in the ability to process large numbers of projects through the serial generator interconnection study process (e.g., first come, first serve). The limitations result in delays and in processing projects in the queue. Other problems are caused by projects withdrawing from the queue which lead to restudies. DESC asserts that the proposed cluster study process will alleviate these difficulties in studying and processing projects in the queue. DESC further claims that the cluster study process allows projects to be studied in clusters, reducing processing times and aiding in efficient administration of the interconnection queue.²⁴

According to DESC, inherent limitations in studying such a large number of projects in serial fashion arise regardless of the type of generation, but variable solar QF generators present study challenges and concerns. The majority of requests received by DESC are for variable solar QF generators. DESC states that “as the level of non-dispatchable QF solar generation on DESC’s system continues to climb, studying the incremental impact of each additional project becomes progressively more difficult.”²⁵ DESC acknowledges in its Application that:

it is DESC’s responsibility to account for these QF, intermittent generators to ensure there is available distribution and transmission capability to deliver the energy to its customers. Transitioning to the cluster study process will ensure that DESC remains able to fully evaluate these solar generators, but also conduct these evaluations in a timely manner.²⁶

²⁴ *Id.*

²⁵ *Id.*, p. 8.

²⁶ *Id.*

DESC further states in its Application that “benefits of the cluster-study process are increasingly being recognized both in this state and across the country.”²⁷ Other utilities, regional transmission organizations and independent service operators throughout the country have transitioned from the serial study generator interconnection process to the cluster study generator interconnection process. The Commission has acknowledged the potential benefits of the cluster study process in Order No. 2021-439 when approving the Duke Energy Carolinas, LLC and Duke Energy Progress, LLC’s cluster-study process.²⁸ As stated by the Commission in Order No. 2021-439, the cluster study process allows “projects to be clustered and studied together and then allocates the costs to interconnect among all Interconnection Customers in the cluster based on their relative impact to the grid.”²⁹ Like Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, DESC asserts that it has a substantial volume of requests and corresponding delays with the serial study process. The DESC Proposal “is substantially similar to the Duke Energy Appendix and seeks to achieve the same benefits outlined by the Commission in its order approving the same”³⁰ and was developed with the input from an industry consultant and stakeholders.

The DESC proposal would be available to all Interconnection Customers not eligible for study under SCGIP Section 2 (20 kW Inverter Process) or SCGIP Section 3 (Fast Track Process).

²⁷ *Id.*

²⁸ The Commission said that the “existing serial queuing and study process is no longer capable of managing the significant number of new Interconnection Customers requesting to connect to the Duke systems.” Order No. 2021-439 at p. 7.

²⁹ Order No. 2021-439 at p. 10.

³⁰ Application, p. 9.

The DESC Proposal contains, among other things, provisions addressing:

- Requirements to enter a cluster, including deposit amounts;
- Exchange of information to perfect an Interconnection Request;
- Site control requirements;
- Initiation of a cluster and the DISIS³¹ necessary to progress through the study process;
- Cost allocation associated with the required interconnection studies and the facilities necessary to facilitate the interconnection;
- Readiness Milestones and security requirements;
- Penalties for withdrawing from a cluster;
- The process after the DISIS leading to the execution of an interconnection agreement;
- An informational interconnection study process; and
- Options available to Interconnection Customers to effectuate the transition to a clustering approach.³²

Section 4 of the DESC Proposal contains a new study option called the Informational Interconnection Study, which is substantially similar to Duke Energy's approved process.³³ The intent of the Informational Interconnection Study is to aid a prospective Interconnection Customer in its business decisions related to interconnection of a Generating Facility prior to entering the Definitive Interconnection Study Process (DISP). The Informational Interconnection Study consists of analysis based on the project-related assumptions and scope of work specified by the Interconnection Customer and agreed to by DESC in the Informational Interconnection Study Agreement.

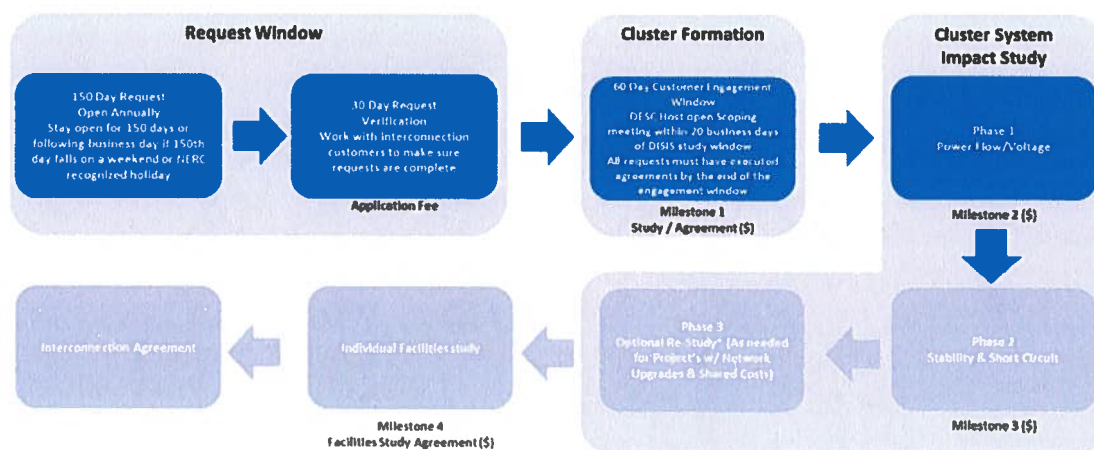
³¹ DISIS means Definitive Interconnection System Impact Study.

³² Application, pp. 10-11.

³³ Application, p. 11.

An overview of DESC's DISP is contained within Section 5 of Appendix DESC CS to the SCGIP and consists of the following steps: (1) an Interconnection Request window; (2) cluster formation including a Customer Engagement Window; and (3) a cluster system impact study process, consisting of Phase 1, Phase 2 and, if necessary, Phase 3 studies. Figure 1, below, is an overview of this process:

FIGURE 1
Phases of Definitive Interconnection Process



As Interconnection Customers progress through the DISP, they must meet specific Readiness Milestones to demonstrate project readiness and certain financial commitments. Each Readiness Milestone and corresponding financial commitment must be met prior to continuing on to the next stage of the DISP. The study component of the DISP is a Definitive Interconnection System Impact Study (DISIS), which evaluates the impact of a proposed interconnection within the DISIS Cluster on the reliability of the DESC system. The DISIS includes a mandatory Phase 1 study, a Phase 2 study, and, if necessary, a Phase 3 study.

As outlined in Section 5.3.1 of Appendix DESC CS to the SCGIP, prior to commencing the DISIS, DESC will offer enrollment into the upcoming annual DISIS Cluster during a 150-day DISIS Request Window. During this enrollment period, Interconnection Customers may submit Interconnection Requests to be included in the upcoming DISIS Cluster. The DISIS Request Window will be open annually on April 1 and would remain open for 150 calendar days. The DISIS Request Window provides interested potential Interconnection Customers the framework through which they may enter the DISIS. The DISIS Request Window will be immediately followed by a 30-day DISIS Verification Period. The DISIS Verification Period permits DESC and Interconnection Customers to work collaboratively to ensure that all relevant data and information associated with the Interconnection Request has been received and verified.

If DESC receives one or more valid Interconnection Requests before the end of the DISIS Verification Period, DESC must commence an initial 60 calendar day Customer Engagement Window. The Customer Engagement Window enables DESC and Interconnection Customers to collaboratively build models, confirm data, cure any deficiencies, and generally prepare for commencing the DISIS. The Customer Engagement Window also reduces the risk and cost associated with Interconnection Customers that withdraw from the process prior to commencing the DISIS Cluster study. If Interconnection Customers decide to withdraw at this stage, DESC asserts that it will not affect the DISIS results or trigger a Withdrawal Penalty.

There are required study deposits in the DESC Proposal for Interconnection Customers entering the DISIS. The deposits are identical to Duke Energy's required

deposit amounts and were agreed to as part of the DESC's stakeholder process. Under Section 2.1 of the DESC Proposal, to enter the DISP and be studied during a DISIS Cluster, Interconnection Customers must submit a valid Interconnection Request before the close of the DISIS Request Window. DESC proposes study deposits under a tiered approach, which increase deposit amounts based upon size (both in MW and kWac) stated in the Interconnection Request. The study deposits proposed in the DESC Proposal are as follows:

FIGURE 2

Study Deposits

Size of Project Associated With Interconnection Request	Amount of Deposit
≤ 1 MW	\$10,000+ \$1/kWac
>1 MW < 20 MW	\$20,000 + \$1/kWac
≥ 20 MW < 50 MW	\$35,000 + \$1/kWac
≥ 50 MW	\$50,000 + \$1/kWac

DESC initiates a DISIS Verification Period at the close of the DISIS Request Window. The DISIS Verification Period is a 30-calendar day period. In the DISIS Verification Period, DESC identifies any missing information needed prior to beginning the 60-day Customer Engagement Window, which will be corrected by the Interconnection Customer. DESC shall open the Customer Engagement Window upon the close of the DISIS Verification Period. During this Customer Engagement Window, DESC will work with Interconnection Customers to verify data and obtain all information needed to build study models, cure any deficiencies in the Interconnection Requests, and generally prepare

for the start of the DISIS. DESC and Interconnection Customers must meet certain requirements prior to the close of the Customer Engagement Window.

DESC will host an open Scoping Meeting for all Interconnection Customers with Interconnection Requests received in the DISIS Request Window during the Customer Engagement Window, and within twenty (20) Business Days after the close of the DISIS Verification Period. DESC will also hold individual customer-specific Scoping Meetings if requested by an Interconnection Customer within five (5) days of the larger Scoping Meeting. The purpose of the Scoping Meeting is to discuss alternative interconnection options; to exchange information, including any available transmission data that would reasonably be expected to impact such interconnection options; to review such information; and to determine the potential feasible Points of Interconnection. At the close of this Scoping Meeting, the objective is for each Interconnection Customer to have a definitive project size and Point of Interconnection to facilitate an efficient Cluster Study. An Interconnection Customer must select a single definitive Point of Interconnection to be studied no later than the execution of the Definitive System Impact Study Agreement.³⁴

Similar to the cluster study process adopted in Order No. 2021-439, DESC shall provide each Interconnection Customer requesting to enter the DISIS cluster with a non-binding updated good faith estimate of the cost and timeframe for completing the DISIS. Each Interconnection Customer must: (1) execute a DISIS Agreement; (2) provide initial security equal to one times the study deposit; and (3) provide evidence satisfactory to DESC of either an initial Readiness Milestone (M1) or additional security in the form of a

³⁴ Application, pp. 15-16.

letter of credit or cash in lieu of the M1 Readiness Milestone equal to one times the study deposit.

During the DISIS phase, DESC will process all Interconnection Customers for that cluster through a phased study process to minimize restudies caused by Interconnection Customers withdrawing from the Queue. Interconnection Customers must execute a Definitive Interconnection System Impact Study Agreement (DISIS Agreement). Unless otherwise agreed, DESC proposes to provide the Interconnection Customer with a DISIS Agreement within 30 calendar days of DESC's acknowledgement of a valid Interconnection Request requesting a DISIS be performed. An Interconnection Customer must execute the DISIS Agreement by close of the Customer Engagement Window, or its Interconnection Request will be withdrawn. The DISIS Cluster, therefore, shall consist of all eligible Interconnection Requests that have (i) satisfied M1 (or provided financial security in lieu of M1), (ii) executed a DISIS Agreement, and (iii) provided all required information before the close of the Customer Engagement Window.

DESC determines each Interconnection Customer's share of the costs of completing the DISIS by allocating:

- (1) ten percent (10%) of the applicable study costs to Interconnection Customers on a per capita basis based on number of Interconnection Requests included in the applicable Cluster; and
- (2) ninety percent (90%) of the applicable study costs to Interconnection Customers on a pro-rata basis based on requested megawatts included in the applicable Cluster.

Figure 3 (below) provides an example of the allocation of study costs in the DISIS Cluster.

FIGURE 3

Example of Allocation of Study Costs in DISIS Cluster³⁵

1,000 MW capacity in Cluster Study Hypothetical Study Cost = \$75,000			
	10 MW Interconnection Request	90 MW Interconnection Request	900 MW Interconnection Request
10% per capita allocation	$10\% * 1/3 = 3.33\%$	$10\% * 1/3 = 3.33\%$	$10\% * 1/3 = 3.33\%$
90% pro rata allocation	$90\% * 10/1000 = 0.9\%$	$90\% * 90/1000 = 8.1\%$	$90\% * 900/1000 = 81\%$
TOTAL	$3.33\% + 0.9\% = 4.23\% \text{ total}$ Hypothetical Cost: $\$75,000 * 4.23\% = \$3,173.50$	$3.33\% + 8.1\% = 11.43\% \text{ total}$ Hypothetical Cost: $\$75,000 * 11.43\% = \$8,572.50$	$3.33\% + 81\% = 84.33\% \text{ total}$ Hypothetical Cost: $\$75,000 * 84.33\% = \$63,247.50$

Section 5.3.4 of the DESC Proposal establishes the allocation of Interconnection Facilities and Upgrade Costs within the DISIS Cluster. Costs of Interconnection Facilities are directly assigned to the Interconnection Customers using such facilities, but the costs of Shared Interconnection Facilities shall be allocated based on the number of Generating Facilities sharing the Interconnection Facilities on a per capita basis. Interconnection Upgrades associated with substations or switching stations would be allocated based on the number of Generating Facilities interconnecting at an individual station on a per capita basis. Per the DESC Proposal, all other Network Upgrades would be allocated based on the proportional impact on each Generating Facility on such Network Upgrades. Costs of Distribution Upgrades are allocated to each

³⁵ See, Sections 5.3.3 - 5.3.4 of DESC's Proposal.

Interconnection Customer based upon the proportional impact of each individual Generating Facility based upon the need for the Distribution Upgrade. Distribution line work (e.g., reconductoring) would be allocated to those Generating Facilities contributing to the need for the Upgrade on a per MW basis, based upon location (% of Upgrade). All other Distribution Upgrade costs will be allocated on a per capita basis (i.e., on a per Interconnection Request basis) based upon the number of projects on the feeder or substation contributing to the need for the Upgrade.

Satisfaction of the requirements of Readiness Milestones 1, 2, and 3 is required as applicable throughout the DISP to demonstrate the readiness of the Interconnection Customer to develop the Generating Facility. Satisfaction of the requirements of Readiness Milestone 4 is required after the DISP has concluded, but before the Interconnection Agreement is issued by DESC to the Interconnection Customer. An Interconnection Customer who does not satisfy the requirements of an applicable Readiness Milestone (or provide additional security in lieu thereof) would be deemed withdrawn from the Queue and would be required to pay a Withdrawal Penalty. The Figure below outlines these milestones in the DESC Proposal:

FIGURE 4
Readiness Milestones in Definitive Interconnection Study Process

Readiness?	M1 – Due by close of 60 CDS Customer Engagement Window	M2 – Due within 20 CDS of Phase 1 Report Meeting	M3 – Due within 20 CDS of Phase 2 Report Meeting	M4 – Due within 10 CDS of Facilities Study Agreement Delivery
Yes	Financial Security 1x Study Deposit Readiness options: (1) Executed Term Sheet (2) Reasonable evidence selected in Resource plan or offered into RSP	Financial Security 1x Study Deposit Readiness options: (1) Executed Term Sheet (2) Reasonable evidence selected in Resource plan or offered into RSP	Financial Security 1x Study Deposit Readiness options: (1) Executed Contract (2) Reasonable evidence selected in Resource plan and applied for CPCN, if required, or selected in RSP (3) Application meeting all eligibility requirements to participate in a voluntary renewable energy program approved by the Commission pursuant to S.C. Code Section 58-41-30	Financial Security Greater of System Upgrade costs or amount required by Section 5.3.10.4. Readiness options: (1) Executed Contract (2) Reasonable evidence selected in Resource plan and applied for CPCN, if required, or selected in RSP
No	Financial Security 2x Study Deposit	Financial Security 2x Study Deposit	Financial Security 3x Study Deposit	Financial Security Greater of System Upgrade costs or amount required by Section 5.3.10.4.

Section 5.5 of the DESC Proposal sets the minimum deposit levels as shown below in Figure 5 and such deposits are used in the Transitional Serial and Transitional Cluster process.

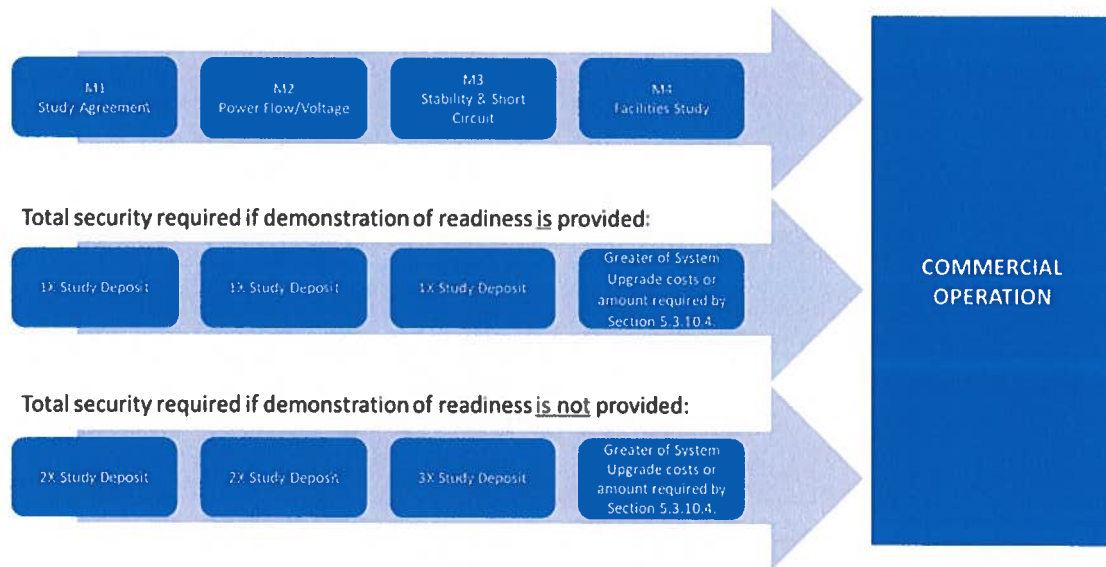
Figure 5 -- Deposit Amounts

Size of Project Associated with Interconnection Request	Minimum Deposit Amount
Greater than 1 MW, Up to 5 MW	\$100,000
Greater than 5 MW, Up to 10 MW	\$150,000
Greater than 10 MW, Up to 20 MW	\$200,000
Greater than 20 MW, But less than 50 MW	\$500,000
Greater than 50 MW	\$800,000

The Interconnection Customer may opt to provide security in lieu of satisfying the requirements of Readiness Milestones M1 - M4, as described in Section 5.3.10 of the DESC Proposal. The security provided is applied towards the security amount required for each successive milestone if the Interconnection Customer does not withdraw. For example, the security provided for M2 is applied to the additional amount of security required for M3. The amount of security required for each Readiness Milestone for Interconnection Customers that do not provide a demonstration of readiness is shown Figure 6, below:

FIGURE 6

Financial Security Requirements



The DESC Proposal does provide that if an Interconnection Customer is initially required to provide increased financial security under Section 5.3.11 because it cannot satisfy the requirements of a Readiness Milestone under Section 5.3.10, but subsequently does satisfy those requirements prior to the next Readiness Milestone, its security shall be reduced accordingly.³⁶

Section 5.7.3 of the DESC Appendix CS explains the Withdrawal Penalty. An Interconnection Customer is subject to a Withdrawal Penalty if it withdraws its Interconnection Request or the Generating Facility does not otherwise reach Commercial Operation. However, the Withdrawal Penalty will not be applied if DESC determines consistent with good utility practice that:

³⁶ DESC Proposal, p. 27.

(1) the withdrawal does not negatively affect the timing or cost to interconnect of equal or lower queued projects; or

(2) the cost responsibility identified for that Interconnection Customer in the current study report associated with Network Upgrades to the DESC system increased by more than twenty-five percent (25%) compared to the costs identified in the previous report; or

(3) if the Interconnection Customer withdraws after the Interconnection Facilities Study report is published and before providing the final Milestone Payment, and the cost responsibility for that Interconnection Customer identified in the Interconnection Facilities Study report increases by more than one hundred percent (100%) compared to the prior report.³⁷

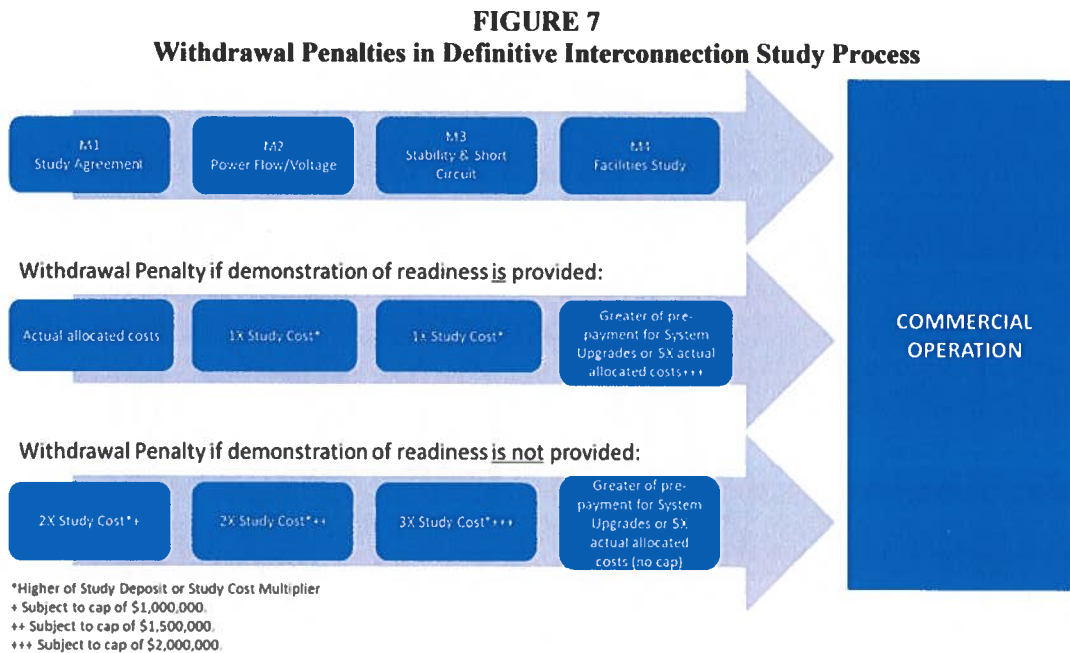
Under Appendix DESC CS, DESC must follow the process established in SCGIP Section 6.3.3 if the Interconnection Customer requests withdrawal during the Definitive Interconnection Study Process (DISP). Section 6.3.3 of SCGIP states:

Section 6.3.3. Within 60 Business Days of any voluntary or deemed withdrawal of the Interconnection Request, the Utility will provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such work performed, and (2) the Interconnection Customer's Section 1.3 Interconnection Request deposit submitted to the Utility to pay for such work. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Utility shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Utility within 20 Business Days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Utility shall refund to the Interconnection Customer an amount equal to the difference within 20 Business Days of the final accounting report.³⁸

³⁷ *Id.*, p. 27.

³⁸ Order No. 2016-191, Order Exhibit No. 1, p. 26.

As provided in the DESC Proposal, DESC must also (i) impose the Withdrawal Penalty described in Section 5.7.3 of Appendix DESC CS to the SCGIP and (ii) refund any of the eligible portion of Interconnection Customer's study deposit that exceeds the share of the costs assigned to the Interconnection Customer that DESC has incurred after settling the final invoice pursuant to SCGIP Section 6.3.3. Figure 7 below explains the process in detail:



Calculation of the Withdrawal Penalty amount is dependent on (1) whether a demonstration of readiness was provided, and (2) the phase of the Definitive Interconnection Study Process that the Interconnection Customer is in at the time of withdrawal. Application of a Withdrawal Penalty requires a determination that other Interconnection Customers in the Cluster are negatively affected by the withdrawing Interconnection Customer. There are caps or limitations on the amount of the Withdrawal Penalty for the Interconnection

Customer if the withdrawal is prior to M4. There is no cap on the M4 Withdrawal Penalty amount for nonready projects when the withdrawal is after M4.³⁹

Section 5.6.1 of Appendix DESC CS to the SCGIP is the dispute resolution process that applies when an Interconnection Customer initiates a dispute pursuant to SCGIP Section 6.2 after entering the DISP. Pursuant to Section 5.6.1, the disputing Interconnection Customer shall have the option to either withdraw from the Cluster and be studied as part of the next Cluster or to continue being evaluated as part of the Cluster provided that it complies with all requirements of the DISP, including continuing to demonstrate readiness or provide financial security pursuant to Section 5.3.10 and 5.3.11.⁴⁰

DESC further states that it shall implement the transitional process outlined in Section 3 of Appendix DESC CS to the SCGIP. The Transitional Serial Process is an option open to Interconnection Customers that have a final System Impact Study Report and an executed Facilities Study Agreement prior to the effective date of the DESC Proposal. The Transitional Cluster Process is available to an Interconnection Customer with an assigned Queue Position prior to the effective date of the DESC Proposal and if the Interconnection Customer completes the requirements of Section 2.1 and Section 3 of Appendix DESC CS. In summary, any Interconnection Customer that has received a Queue Number but that has not executed an Interconnection Agreement with DESC prior to the effective date of the DESC Proposal may request in writing after receiving notice from DESC to be studied under: (1) the Transitional Serial Process or (2) a Transitional

³⁹ Application, pp. 28-29.

⁴⁰ Application, p. 30.

Cluster Process. Alternatively, an Interconnection Customer may withdraw from the queue and reenter and participate in a future DISIS cluster. Withdrawal penalties may be applied if an Interconnection Customer withdraws from the Transition Process.

DESC further requested for consideration and approval by the Commission of its proposal, Appendix DESC CS, without hearing. The Commission finds request for consideration without a formal hearing to be reasonable. Accordingly, the Commission makes the following Findings of Fact and Conclusions of Law:

III. FINDINGS OF FACT

1. The Commission adopted the SCGIP to regulate DESC's process for studying Interconnection Requests submitted by South Carolina Interconnection Customers subject to the Commission's jurisdiction, including qualifying facilities ("QFs") under the Public Utility Regulatory Policies Act of 1978 ("PURPA").

2. Under the SCGIP, such projects have traditionally been processed and studied on a "first come, first served" basis in a "serial queue" based upon the timing of their submission of an Interconnection Request.

3. DESC states and informs the Commission in its Application that the Federal Energy Regulatory Commission (FERC) has already approved the corresponding revisions proposed by Appendix DESC CS in Attachment M to DESC's Open Access Transmission Tariff ("OATT") containing its Large Generator Interconnection Procedures ("LGIP") and Standard Large Generator Interconnection Agreement ("LGIA").

4. DESC further states and asserts to the Commission that such approved modifications by FERC, along with the SCGIP modifications proposed as Appendix DESC in this proceeding, fully enable DESC's transition from a serial study generator interconnection approach to a cluster study generator interconnection approach.

5. DESC's Application and Proposal, Appendix DESC CS, demonstrate that DESC specific reform is needed to address the growing challenges and complexities facing DESC in its interconnection study process and to provide for a transition from the serial study process to a definitive interconnection cluster study process.

6. The DESC Proposal is similar to the cluster generator interconnection study process adopted and approved by the Commission in Order No. 2021-439.

7. DESC's existing serial queuing study process is no longer capable of managing the significant number of new Interconnection Customers requesting to connect to the DESC system.

8. It is the responsibility of the utility to account for, and evaluate, qualifying facilities, solar generators, intermittent generators, and any interconnection customer to ensure there is available distribution and transmission capability to deliver the energy.

9. Transitioning to the cluster generator interconnection study process will ensure that DESC remains able to fully evaluate solar generators, qualifying facilities, intermittent generators, and any interconnection customer, but also conduct these evaluations in a timely manner.

10. The Cluster Study approach proposed by DESC in Appendix DESC CS allows "ready" projects to be clustered and studied together and then allocates the costs to interconnect among the Interconnection Customers in the cluster based on their relative impact to the grid.

11. The Commission finds that Appendix DESC CS (a) shall allow for the provision of safe and reliable service and (b) shall result in timely and non-discriminatory processing of the SCGIP.

12. The Commission finds DESC's request for consideration without a formal hearing is reasonable.

13. The Commission finds approval of DESC's request regarding the implementation and administration of the proposed DESC-specific cluster-study process, Appendix DESC CS, is reasonable and supported due to the challenges and delays faced by Interconnection Customers and DESC with the current serial study process.

14. The Commission finds that DESC is authorized to transition its generator interconnection study process from a serial study process to a cluster study process (the "Definitive Interconnection Study Process" or "DISP") pursuant to Section 1.1.1.3 of the SCGIP.

15. With the approval of the new DESC-specific Appendix DESC, the Commission finds that DESC shall administer the cluster study process (the "Definitive Interconnection Study Process" or "DISP") and shall initiate the transition from a serial generator interconnection study process to the cluster generator interconnection study process as outlined in Appendix DESC CS.

16. Based on DESC's Application, the comments filed by the Office of Regulatory Staff and Carolinas Clean Energy Business Association, and the entire record of the proceeding, the Commission finds that the DESC Proposal -- entitled Appendix DESC CS to the SCGIP -- provides DESC-specific reforms to the SCGIP for DESC's Interconnection Customers, is similar to the reforms to the SCGIP adopted in Order No. 2021-439, and is consistent with Act 62's requirements for the Commission to ensure that the generator interconnection process is efficient, reasonable, and non-discriminatory for all Interconnection Customers.

17. DESC conducted a stakeholder process as part of the development of the DESC Proposal and provided the opportunity for interested persons and parties to provide comments and recommendations.

18. Based upon the assertions and information in its Application that the FERC has already approved the corresponding revisions proposed by Appendix DESC CS in Attachment M to DESC's Open Access Transmission Tariff ("OATT") containing its Large Generator Interconnection Procedures ("LGIP") and Standard Large Generator Interconnection Agreement ("LGIA"), the Commission concludes that such FERC approved modifications, along with the SCGIP modifications proposed as Appendix DESC CS in this proceeding, shall enable DESC's transition from a serial study generator interconnection approach to a cluster study generator interconnection approach.

19. The Office of Regulatory Staff does not object to DESC transitioning "from a serial study generator interconnection approach to a cluster study generator

interconnection approach and is substantively similar to” that approved in Order No. 2021-439.

20. The Carolina Clean Energy Business Association supports the approval of DESC Proposal and actually provided comments and recommendations which were incorporated in the DESC Proposal by DESC.

IV. CONCLUSIONS OF LAW

1. The Cluster Study approach proposed by DESC with Appendix DESC CS is consistent with the requirements of Act 62 for the Commission to ensure that the generator interconnection process is efficient, reasonable, and non-discriminatory for all Interconnection Customers.

2. The DESC’s Proposal, entitled Appendix DESC CS to the SCGIP, as addressed herein should be approved.

V. ORDERING PARAGRAPHS

1. The Application of DESC for Approval of the Appendix DESC CS to the SCGIP is granted. In particular:

a. The Commission approves the revisions to the current SCGIP for DESC, entitled “Appendix DESC CS to the SCGIP” in DESC’s Application,⁴¹ to allow DESC which is subject to the SCGIP the option to implement, and transition into, an alternative cluster study interconnection study process;

⁴¹ See Exhibit 1 to the DESC Application for Approval of the Appendix DESC CS filed January 12, 2022.

b. The Commission authorizes DESC to transition its South Carolina generator interconnection study process to a Definitive Interconnection Study Process;

c. The Commission approves the new Appendix DESC CS, presented as Exhibit 1 to DESC's Application, which is attached as Order Exhibit No. 1;

d. Appendix DESC CS, which is attached as Order Exhibit No. 1, is the plan that Dominion Energy South Carolina, Inc. shall use to administer the Definitive Interconnection Study Process; and

e. Based upon the statements of DESC in its Application, the Commission understands that the Federal Energy Regulatory Commission (FERC) has already approved corresponding revisions to Attachment M to DESC's Open Access Transmission Tariff ("OATT") containing its Large Generator Interconnection Procedures ("LGIP") and Standard Large Generator Interconnection Agreement ("LGIA") and that such approved modifications, along with the SCGIP modifications proposed in this proceeding, fully enables DESC's transition from a serial study generator interconnection approach to a cluster study generator interconnection approach. If any additional approval or required adjustments are needed for DESC implementation and transition to the cluster generator interconnection study process, DESC shall keep the Commission informed in writing by filing such information or requests with the Commission and copy to ORS.

2. The Commission approves the revisions to the current SCGIP presented as Appendix DESC CS to DESC's Application, for DESC to implement, and transition into, an alternative cluster study interconnection study process.

3. DESC shall strictly enforce the South Carolina Generator Interconnection Procedures (SCGIP), with its approved modifications, and shall further strictly enforce the process and timelines as provided in Appendix DESC CS.

4. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:



A handwritten signature in blue ink, appearing to read "Florence P. Belser", is written over a horizontal line.

Florence P. Belser, Vice Chair
Public Service Commission of
South Carolina

EXHIBIT 1

DESC APPLICATION

DOCKET NO. 2019-326-E

Dominion Energy South Carolina, Inc.

Appendix DESC CS to the SCGIP

Appendix DESC CS**Dominion Energy South Carolina, Inc.****Appendix to South Carolina Generator Interconnection Procedures for
Implementing Alternative Definitive Interconnection Study Process****Effective / /2022**

Pursuant to Section 4.1.1 of the South Carolina Generator Interconnection Procedures (SCGIP), Dominion Energy South Carolina, Inc. ("DESC" or "Utility") has obtained authorization from the Public Service Commission of South Carolina ("Commission") to transition DESC's SCGIP Section 4 generator interconnection study process for South Carolina-jurisdictional Interconnection Customers to a Cluster Study process. The DESC Cluster Study Process detailed in this Appendix DESC CS ("Appendix") is called the "Definitive Interconnection Study Process." DESC will apply the Definitive Interconnection Study Process consistently to all South Carolina-jurisdictional and FERC-jurisdictional Interconnection Customers.

Section 1. Overview of Appendix DESC CS

- 1.1 This Appendix allows transition of existing Interconnection Customers (Section 3 Transitional Cluster Study Process) with a valid queue position, allows prospective Interconnection Customers to informally receive existing DESC study information (Section 4 Informational Interconnection Study Process for Transmission System Interconnections), and creates an annual Definitive Interconnection Study Process for Interconnection Customers (Section 5 Overview of Definitive Interconnection Study Process) requesting to interconnect and to operate in parallel with DESC's System in South Carolina that are not eligible to apply for interconnection under SCGIP Section 2 (20 kW Inverter Process) or Section 3 (Fast Track Process).
- 1.2 This Appendix shall apply if the Interconnection Customer does not have a fully executed Interconnection Agreement for the Generating Facility as of its effective date. This Appendix shall not apply to Generating Facilities having a fully executed Interconnection Agreement as of the Appendix's effective date, unless the Interconnection Customer proposes a Material Modification, transfers ownership of the Generating Facility, or application of the Appendix is agreed to in writing by DESC and the Interconnection Customer. Revised fees and new deposits may apply.
- 1.3 Capitalized terms shall have the meanings specified in the SCGIP Attachment 1 Glossary of Terms, or in Attachment 1 of this Appendix.

- 1.4 Cross references to Sections of this Appendix shall be identified by the applicable Section or Attachment. Cross references to Sections or attachments of the SCGIP shall be preceded by "SCGIP."

Section 1 provides this overview of the Appendix.

Section 2 addresses modified deposits and requirements applicable to Interconnection Customers electing to proceed through the Definitive Interconnection Study Process.

Section 3 describes the Transitional Study Process.

Section 4 describes an optional Informational Interconnection Study process available to prospective Interconnection Customers considering submitting a Transmission System Interconnection Request(s).

Section 5 establishes the detailed process and requirements for implementing the Definitive Interconnection Study Process.

Attachment 1 provides certain supplemental definitions applicable to the DESC Definitive Interconnection Study Process in addition to the definitions identified in SCGIP Attachment 1.

Attachment 2 is the Transitional Cluster System Impact Study Agreement.

Attachment 3 is the Informational Interconnection Study Request Form and Study Agreement.

Attachment 4 is the Definitive Interconnection System Impact Study (DISIS) Agreement.

Section 2. Modified SCGIP Section 1.3 Interconnection Request Requirements

- 2.1 Interconnection Customers requesting to proceed under the Definitive Interconnection Study Process shall meet all requirements of SCGIP Section 1.3. However, in lieu of the deposit required by SCGIP Section 1.3.1.2, the Interconnection Request deposit for Interconnection Customers to be evaluated under the Definitive Interconnection Study Process shall equal:

- (1) \$10,000 plus one dollar (\$1.00) per kWac of capacity specified in the Interconnection Request Application Form for all Interconnection Requests 1 MW or less;
- (2) \$20,000 plus one dollar (\$1.00) per kWac of capacity specified in the Interconnection Request Application Form for all Interconnection Requests greater than 1 MW and less than 20 MW;
- (3) \$35,000 plus one dollar (\$1.00) per kWac for Interconnection Requests between 20 MW and 50 MW; or
- (4) \$50,000 plus one dollar (\$1.00) per kWac for all Interconnection Requests greater than 50 MW.

The deposit is intended to cover DESC's reasonably anticipated costs including overheads for conducting the DISIS and the Facilities Study. In addition, such deposit shall be applicable towards DESC's cost of administering the generator interconnection process as well as any Upgrades and Interconnection Facilities, including overheads under a future Interconnection Agreement(s) (if applicable).

- 2.2 An Interconnection Customer wishing to join the next DISIS Cluster shall submit its Interconnection Request to DESC no later than the close of the DISIS Request Window established in Section 5.3.1.
- 2.3 DESC may request additional technical information from the Interconnection Customer as DESC may reasonably determine necessary consistent with Good Utility Practice to complete the DISIS. Where DESC determines that technical information provided in an Interconnection Request is not adequate to initiate the Definitive Interconnection Study Process and requests the Interconnection Customer provide supplemental information prior to the close of the initial Customer Engagement Window provided for in Section 5.3.1, DESC shall provide to the Interconnection Customer a written list detailing all information that must be provided by the Interconnection Customer within ten (10) Business Days of the request where the Interconnection Customer's failure to provide the information required by DESC within the deadline will result in the Interconnection Request being deemed withdrawn by DESC.

Section 3. Transitional Study Process

Any Interconnection Customer that has received a Queue Number but has not executed an Interconnection Agreement with DESC prior to the effective

date of this Appendix may request in writing after receiving notice from DESC to be studied under the following Transition Procedures.

An Interconnection Customer electing to complete the study process under the Transition Procedures must notify DESC in writing and meet all transitional readiness milestone requirements within sixty (60) Calendar Days of the later of the effective date of this Appendix or delivery of written notice of DESC's transition to the Definitive Interconnection Study Process provided by DESC. An Interconnection Customer that does not meet the Transition Procedure requirements shall withdraw or be deemed withdrawn from the Queue and then may submit a new Interconnection Request to be studied under a future Definitive Interconnection Study Process.

3.1 Optional Transitional Serial Process.

An Interconnection Customer that has a final System Impact Study Report, and a Facilities Study Agreement executed by the Interconnection Customer prior to the effective date of this Appendix, may opt to continue with the serial Facilities Study process if the Interconnection Customer provides notice in writing to DESC and meets each of the following requirements that demonstrate readiness within the sixty (60) Calendar Day timeframe prescribed in Section 3:

- a) The Interconnection Customer makes a supplemental deposit equal to the greater of:

- 1) one hundred percent (100%) of the System Upgrade costs identified in the Interconnection Customer's System Impact Study Report; or

- 2) a minimum deposit based upon the Interconnection Customer's requested Maximum Generating Capacity as identified in the Interconnection Request of:

- \$100,000 for Interconnection Customers greater than 1 MW up to 5MW;

- \$150,000 for Interconnection Customers greater than 5 MW up to 10 MW;

- \$200,000 for Interconnection Customers greater than 10 MW up to 20 MW;

- \$500,000 for Interconnection Customers greater than 20 MW up to 50 MW; or

\$800,000 for Interconnection Customers greater than 50 MW.

The supplemental deposit shall be in the form of an irrevocable letter of credit upon which DESC may draw or a cash deposit. The supplemental deposit shall be held by DESC as pre-payment for the estimated cost of System Upgrades to be designed by DESC in the SCGIP Section 4.4 Facilities Study.

- b) The Interconnection Customer affirms site control consistent with SCGIP Section 1.5 to construct the entire Generating Facility and all required Interconnection Facilities to the Point of Interconnection to DESC's System.
- c) The Interconnection Customer provides one of the following:
 - i. A contract, binding upon the parties to the contract, for the sale of the Generating Facility's energy where the term of the sale is not less than five (5) years; or
 - ii. Reasonable evidence that the Generating Facility is included in DESC's Resource Plan or has received a contract award in a Resource Solicitation Process.

3.1.1 For each Interconnection Customer that achieves the Transitional Serial readiness requirements described in Section 3.1, DESC shall make reasonable efforts to complete the Facilities Study pursuant to the process established in SCGIP Section 4.4 within the timeframe prescribed in Section 5.4.1. DESC and the Interconnection Customer shall then follow the SCGIP Section 5 Interconnection Agreement and Scheduling process, except that the Section 5.3.10.4 Readiness Milestone 4 requirement shall not apply to Interconnection Customers participating in the Transitional Serial Study.

3.1.2 If an Interconnection Customer that has entered the Transitional Serial Study process withdraws the Interconnection Request or otherwise does not reach Commercial Operation, the supplemental deposit amount shall be forfeited to DESC, with amounts deposited for pre-payment of System Upgrades to be used to construct the System Upgrades identified in the System Impact Study Report. If the Interconnection Customer submitted a minimum supplemental deposit amount in excess of its assigned System Upgrades, the minimum deposit amount shall be treated as a Withdrawal Penalty and distributed to fund restudies and if not necessary for restudy will

be distributed to fund future Definitive Interconnection Study Process costs pursuant to Section 5.7.4.

Notwithstanding the foregoing, an Interconnection Customer may withdraw without being subject to a Withdrawal Penalty and be fully refunded pre-payment amounts for System Upgrades where:

- (1) the Interconnection Customer's System Upgrades and Interconnection Facilities identified in the Facilities Study Report exceed the Interconnection Customer's Section 3.1.a).2) minimum deposit amount; and
- (2) the Interconnection Customer's System Upgrades and Interconnection Facilities costs identified in the Facilities Study Report increase by more than twenty-five percent (25%) compared to the costs identified in the Interconnection Customer's System Impact Study Report; and
- (3) the Interconnection Customer provides written notice of withdrawal to DESC within ten (10) Business Days of receipt of the Facilities Study Report.

3.1.3 If the Interconnection Customer proceeds to execute an Interconnection Agreement, the supplemental deposit shall be applied towards future construction costs required to complete the interconnection under the Interconnection Agreement and shall be reconciled by DESC in the detailed estimated Upgrade charges in the Interconnection Agreement.

3.2 Transitional Cluster Study Process.

An Interconnection Customer with an assigned Queue Position prior to the effective date of this Appendix, may opt to enter the Transitional Cluster Study if the Interconnection Customer meets the requirements in Section 3.2.1 and provides written notice to DESC pursuant to the process established in Section 3. All Interconnection Customers who enter the Transitional Cluster Study shall be considered to have an equal Queue Position, and identified Upgrade costs shall be allocated according to Section 5.3.4. The Transitional Cluster Study costs shall be allocated according to the method described in Section 5.3.3.

3.2.1 A Transitional Cluster Study general informational meeting open to all eligible Interconnection Customers shall be held within thirty (30) Calendar Days of either the effective date of this Appendix or the

effective date of FERC-jurisdictional changes to the DESC LGIP incorporating a Transitional Cluster Study Process, whichever is later. To join the Transitional Cluster Study, the Interconnection Customer must meet all of the following requirements within the timeframe prescribed in Section 3:

- a) Execute a Transitional Cluster System Impact Study Agreement (Attachment 2);
- b) Make a supplemental Interconnection Request study deposit, if necessary, to increase the Interconnection Customer's total study deposit to equal the amount required under Section 2.1;
- c) Confirm site control consistent with SCGIP Section 1.5; and
- d) Provide one of the following:
 - i. A contract, binding upon the parties to the contract, or reasonable evidence that the Interconnection Customer has established a legally enforceable obligation binding upon the Interconnection Customer (or has filed a Complaint with the Commission alleging a legally enforceable obligation has been established), for sale of the Generating Facility's energy to DESC, where the term of the sale is not less than five (5) years; or
 - ii. Reasonable evidence that the Generating Facility is included in DESC's Resource Plan or has received a contract award in a Resource Solicitation Process; or
 - iii. Reasonable evidence that the Interconnection Customer's Interconnection Request was accepted by DESC and its Queue Position was initially established at least 365 Calendar days prior to DESC's initiation of the Transitional Cluster Study pursuant to Section 3.

3.2.2 If one or more valid requests are received into the Transitional Cluster Study, DESC shall undertake an expedited thirty (30) Calendar Day customer engagement process as provided for in Section 5.3.1 and

shall then initiate a Phase 1 study under the procedures prescribed in Section 5.3.7.1 (Transitional Cluster Study Phase 1). DESC shall use reasonable efforts to complete the Transitional Cluster Study Phase 1 consisting of a power flow and voltage analysis within one hundred twenty (120) Calendar Days. The Transitional Cluster Study Phase 1 Report shall identify the Interconnection Facilities and System Upgrades that are expected to be required as a result of the Interconnection Requests and provide a non-binding good-faith indicative estimate of cost responsibility and a non-binding good-faith estimated time to construct. DESC will host a meeting to discuss the results of Transitional Cluster Study Phase 1 within ten (10) Calendar Days of issuing the Transitional Cluster Study Phase 1 Report.

- 3.2.3 Within thirty (30) Calendar Days of DESC's publication of the Transitional Cluster Study Phase 1 Report, each Interconnection Customer electing to proceed with Phase 2 of the Transitional Cluster Study shall submit a supplemental deposit based upon the Interconnection Customer's requested Maximum Generating Capacity as identified in the Interconnection Request of:

\$100,000 for Interconnection Customers greater than 1 MW up to 5MW;

\$150,000 for Interconnection Customers greater than 5 MW up to 10 MW;

\$200,000 for Interconnection Customers greater than 10 MW up to 20 MW;

\$500,000 for Interconnection Customers greater than 20 MW up to 50 MW; or

\$800,000 for Interconnection Customers greater than 50 MW.

An Interconnection Customer electing to withdraw from the Transitional Cluster Study prior to commencement of the Phase 2 study shall be assigned its allocated Transitional Cluster Study Phase 1 study costs subject to the withdrawal process under Section 5.7.3, but shall not be subject to any Withdrawal Penalty.

- 3.2.4 Once the Transitional Cluster Study Phase 2 commences, DESC shall complete an updated power flow/voltage analysis (if necessary), stability analysis and short circuit analysis for the Interconnection Customers remaining in the Transitional Cluster Study pursuant to the

procedures in Section 5.3.7.3. DESC shall use reasonable efforts to complete the Phase 2 analysis within one hundred fifty (150) Calendar Days. The results of this analysis shall identify the Interconnection Facilities and System Upgrades expected to be required to reliably interconnect the Generating Facilities proceeding in the Transitional Cluster Study and shall provide a non-binding good-faith estimate of cost responsibility and a non-binding good-faith estimated time to construct. The Transitional Cluster Study Phase 2 Report shall identify each Interconnection Customer's estimated allocated costs for the Interconnection Facilities and System Upgrades that would be borne by the Interconnection Customer under a future Interconnection Agreement.

If the Interconnection Customer withdraws the Interconnection Request at any time after Phase 2 commences or otherwise does not reach Commercial Operation, the Section 3.2.3 supplemental deposit amount provided after Phase 1 shall be treated as a Withdrawal Penalty and distributed to fund future Cluster Study costs pursuant to Section 5.7.4, unless (1) the System Upgrades assigned to the Interconnection Customer exceed the supplemental deposit amount required under Section 3.2.3; and (2) DESC determines consistent with Good Utility Practice that a Withdrawal Penalty should not be assigned pursuant to the standards prescribed in Section 5.7.3.

3.2.5 Within thirty (30) Calendar Days of DESC's publication of the Transitional Cluster Study Phase 2 Report, each Interconnection Customer within the Transitional Cluster Study wishing to continue shall:

- a) Submit a non-refundable deposit equal to one hundred percent (100%) of the System Upgrade costs identified in the Transitional Cluster Study Phase 2 Report, that would be borne by the Interconnection Customer under a future Interconnection Agreement. The deposit shall be in the form of an irrevocable letter of credit upon which DESC may draw or a cash deposit;
- b) Demonstrate definitive readiness by providing:
 - i. a contract, binding upon the parties to the contract, for sale of the Generating Facility's energy to DESC, where the term of the sale is not less than five (5) years; or
 - ii. reasonable evidence that the Generating Facility is included in DESC's Resource Plan and, if required, has

filed an application for a Certificate of Public Convenience and Necessity from the Commission or has received a contract award in a Resource Solicitation Process; and

- c) Execute a Facilities Study Agreement to proceed with Facilities Study under SCGIP Section 4.4.

If any Interconnection Customer within the Transitional Cluster Study fails to meet the foregoing requirements, such Interconnection Customer shall withdraw or be deemed withdrawn by DESC and shall be subject to the Withdrawal Penalty identified in Section 3.2.4. DESC shall determine whether restudy is required pursuant to the procedures of Section 5.3.7.5 prior to executing the Facilities Study Agreements and returning them to the remaining Interconnection Customers.

If an Interconnection Customer withdraws at any time after demonstrating readiness pursuant to this Section and committing to proceed to Facilities Study, the Withdrawal Penalty assigned shall equal the greater of the Section 3.2.3 supplemental deposit, or the pre-payment of System Upgrades required by Section 3.2.5.a), which shall be forfeited to DESC, with amounts deposited for pre-payment of System Upgrades to be used to construct the System Upgrades identified in the Traditional Cluster System Impact Study Report. A Withdrawal Penalty shall be assigned unless (1) the System Upgrades assigned to the Interconnection Customer exceed the supplemental deposit amount required under Section 3.2.3; and (2) DESC determines consistent with Good Utility Practice that a Withdrawal Penalty should not be assigned pursuant to the standards prescribed in Section 5.7.3.

- 3.2.6 DESC shall use reasonable efforts to complete the Facilities Study for all Interconnection Customers in the Transitional Cluster Study pursuant to SCGIP Section 4.4 within the timeframe prescribed in Section 5.4.1. Within ten (10) Business Days of DESC's issuance of the Facilities Study Report, the additional non-refundable deposit provided after Phase 2 of the Transitional Cluster Study shall be reconciled to equal the cost of any System Upgrades identified in the Transitional Cluster Facilities Study Report, that would be borne by the Interconnection Customer under a future Interconnection Agreement, or the Interconnection Request shall withdraw or be deemed withdrawn by DESC. DESC and the Interconnection Customer shall follow the SCGIP Section 5 Interconnection

Agreement and Scheduling administration process, except that the Milestone 4 requirement in Section 5.3.10.4 of this Appendix shall not apply to Interconnection Customers participating in the Transitional Cluster Study.

Section 4. Informational Interconnection Study Process for Transmission System Interconnections

- 4.1 Interconnection Customers evaluating different options (such as different sizes, sites or voltages) are encouraged but not required to use the Informational Interconnection Study process before entering the Definitive Interconnection Study Process. At any time, a prospective Interconnection Customer may request that DESC perform Informational Interconnection Studies. The Interconnection Customer shall submit a separate Informational Interconnection Study Request (Attachment 3) for each Generating Facility and may submit multiple Informational Interconnection Study Requests for different Generating Facility sizes or configurations at a single site. An Informational Interconnection Request to evaluate one Generating Facility interconnecting at two different voltage levels is an example of a request that shall be treated as two Informational Interconnection Study Requests. Any one developer shall have no more than five (5) requests for Informational Interconnection Study reports pending at one time. The Interconnection Customer must submit a \$10,000 deposit with each Informational Interconnection Request if more than one request is submitted for a single Generating Facility or site.
- 4.2 The prospective Interconnection Customer shall use the request form in Attachment 3 and shall describe the project-related assumptions that the Interconnection Customer wants DESC to study within the scope described in Section 4.4 and in accordance with Good Utility Practice. Within ten (10) Business Days after receipt of a request for an Informational Interconnection Study, DESC shall provide to the Interconnection Customer an Informational Interconnection Study Agreement in the form provided in Attachment 3, including a non-binding good-faith estimate of the timing and cost to complete the Informational Interconnection Study. Notwithstanding the above, DESC shall not be required as a result of an Informational Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.
- 4.3 Interconnection Customer shall execute and return the Informational Interconnection Study Agreement to DESC within ten (10) Business Days of receipt of an agreed upon scope of work and shall deliver the Informational Interconnection Study agreement, the technical data, and a \$10,000 deposit

to DESC. DESC shall then countersign and return the Informational Interconnection Study agreement within ten (10) Business Days of receipt.

4.4 Scope of Informational Interconnection Study.

4.4.1 The intent of the Informational Interconnection Study is to aid a prospective Interconnection Customer in its business decisions related to interconnection of a Generating Facility prior to entering the SCGIP Section 4 Study Process. The Informational Interconnection Study shall consist of analysis based on the project-related assumptions and scope of work specified by the Interconnection Customer and agreed to by DESC in the Informational Interconnection Study Agreement. The Informational Interconnection Study shall preliminarily identify the potential Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to interconnect a proposed Generating Facility based upon the results and project-related assumptions of the Informational Interconnection Study. The Informational Interconnection Study shall be performed solely for informational purposes and is non-binding and does not confer any rights as the Interconnection Customer must still successfully apply to interconnect to DESC's System. DESC shall utilize existing studies to the extent practicable in conducting the Informational Interconnection Study.

4.5 Informational Interconnection Study Procedure.

4.5.1 DESC shall use reasonable efforts to complete the Informational Interconnection Study within a mutually agreed upon time period specified in the Informational Interconnection Study Agreement. If DESC is unable to complete the Informational Interconnection Study within such time period, it shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. After the Informational Interconnection Study is concluded, any difference between the Informational Interconnection Study deposit and the actual cost of the study shall be paid to DESC or refunded to the Interconnection Customer, consistent with the timeframe and procedures established in SCGIP Section 6.3.3.

Section 5. Overview of Definitive Interconnection Study Process

5.1 Applicability.

Pursuant to SCGIP Section 4.1.1, DESC is administering the Definitive Interconnection Study Process detailed in this Appendix as the SCGIP Section 4 Study process for all Interconnection Customers. Interconnection Customers that elect to withdraw from the Definitive Interconnection Study Process may be subject to a Withdrawal Penalty, as further addressed in Section 5.7.

5.2 Verification Period and Scoping Meeting for DISIS.

At the close of the DISIS Request Window, DESC shall begin a thirty (30) Calendar Day DISIS Verification Period during which DESC will identify, and Interconnection Customers will correct, any missing information needed prior to beginning the Customer Engagement Window.

DESC shall, within twenty (20) Business Days after the close of the DISIS Verification Period, host an open Scoping Meeting, for all Interconnection Customers with Interconnection Requests received in the DISIS Request Window. DESC shall also hold individual customer specific Scoping Meetings if requested by an Interconnection Customer within five (5) Business Days of the Scoping Meeting.

The purpose of the Scoping Meeting is to discuss alternative interconnection options; to exchange information, including any available transmission data that would reasonably be expected to impact such interconnection options; to review such information; and to determine the potential feasible Points of Interconnection. DESC and Interconnection Customers will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. DESC and Interconnection Customers will each bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate a single and definitive Point of Interconnection to be studied by DESC during the DISIS.

At the Interconnection Customer's option, the Utility and the Interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in the DISIS Cluster process and attempt to eliminate alternatives in a reasonable fashion given the resources and information available. The Interconnection Customer shall select a single definitive Point of Interconnection to be studied no later than the execution of the Definitive System Impact Study Agreement and shall provide affirmation of site control to construct the entire Generating

Facility and all required Interconnection Facilities to the designated Point of Interconnection no later than commencement of the Phase 1 study process described in Section 5.3.7.1.

5.3 Definitive Interconnection System Impact Cluster Study.

5.3.1 Initiation of a DISIS.

DESC shall receive Interconnection Requests during the DISIS Request Window which shall open annually on April 1 and shall remain open for 150 Calendar Days or through the following Business Day if the 150th day falls on a weekend or a NERC recognized holiday. The DISIS Request Window will be followed immediately by the DISIS Verification Period described in 5.2.

DESC will open a sixty (60) Calendar Day Customer Engagement window following the close of the DISIS Verification Period. During the Customer Engagement Window, DESC shall work with the participating Interconnection Customers to build models, verify data, hold Interconnection Customer meetings (including Scoping Meetings), cure any deficiencies in the Interconnection Requests, and generally prepare for the start of the DISIS. Notwithstanding the preceding sentence and upon written consent of all Interconnection Customers within a specific Cluster, DESC may shorten the Customer Engagement Window in order to start the DISIS earlier.

Within the first ten (10) Business Days following the close of the DISIS Verification Period, DESC shall post on a DESC sponsored website a list of Interconnection Requests for that Cluster, identifying for each Interconnection Request:

- (i) the Cluster the Interconnection Request is in;
- (ii) the location by county;
- (iii) the distribution or transmission substation or transmission line or lines where the interconnection will be made; and
- (iv) the type of Generating Facility to be constructed including fuel type such as wind, natural gas, coal, or solar.

Prior to the close of the Customer Engagement Window, each Interconnection Customer shall:

- (i) execute a DISIS Agreement pursuant to Section 5.3.5;

- (ii) provide initial security equal to 1 times the Section 2.1 study deposit amount; and
- (iii) provide evidence satisfactory to DESC of either an initial Readiness Milestone (M1), as described in Section 5.3.10, or additional security in the form of an irrevocable letter of credit or cash in lieu of the M1 Readiness Milestone equal to one times the Study Deposit required in Section 2.1.

At the end of the Customer Engagement Window, all Interconnection Requests that meet the foregoing readiness requirements and that have an executed DISIS Agreement shall be included in that DISIS Cluster. Any Interconnection Requests not deemed sufficient at the close of the Customer Engagement Window shall not be included in the commencing DISIS Cluster. Immediately following the Customer Engagement Window, DESC shall initiate the DISIS.

5.3.2 Initiation of a Resource Solicitation Cluster.

At any time, and solely for purposes of administering a Commission approved Competitive Resource Solicitation, DESC may initiate a Resource Solicitation Cluster. DESC may administer the Resource Solicitation Cluster either separately or as part of a previously initiated DISIS. Where the Resource Solicitation Cluster is studied separately from an existing DISIS Cluster, the Resource Solicitation Cluster shall respect Queue Position and shall be studied as its own Cluster based upon a DESC designated Queue Number where DESC represents the Interconnection Customer(s) in connection with a Competitive Resource Solicitation and shall study the Cluster based upon the Queue Number of the Resource Solicitation Cluster relative to the Queue Position of all other Interconnection Requests/Clusters.

DESC shall publicize the scope of study and timeframe to initiate the Resource Solicitation Cluster study as part of the Competitive Resource Solicitation. The timelines shall indicate the close of the Customer Engagement Window for that Resource Solicitation Cluster. Where DESC is administering the Resource Solicitation Cluster as part of an existing DISIS Cluster, the DISIS shall proceed as described in Sections 5.3.5 and 5.3.7.

A Generating Facility that initially is included in a Resource Solicitation Cluster may also reserve a later Queue Position separate from the Resource Solicitation Cluster. In either case, the Interconnection

Customer must meet all requirements associated with maintaining each Queue Position.

Prior to the commencement of the Facilities Study, DESC must select one of the studied combinations by identifying which Generating Facility or combination of Generating Facilities has been determined to meet the goals of the Competitive Resource Solicitation.

While conducting the DISIS, DESC may suspend further action on the Interconnection Requests in the Competitive Resource Solicitation that are not included in the selected combination. Where a Competitive Resource Solicitation is administered as part of an annual DISIS Cluster, an Interconnection Customer that is rejected in the Competitive Resource Solicitation may elect to continue to be studied as part of the DISIS Cluster by continuing to demonstrate readiness or providing Financial Security, as required in Section 5.3.10 or 5.3.11. In contrast, where a Generating Facility is rejected in a Resource Solicitation Cluster Process administered separately from a DISIS Cluster, the Generating Facility shall lose the Queue Position it held as part of the Competitive Resource Solicitation. If a Generating Facility is selected at the conclusion of the Competitive Resource Solicitation, the Generating Facility may no longer maintain more than one Queue Position.

Prior to the completion of the Facilities Study, DESC may replace a Generating Facility or combination of Generating Facilities, subject to any necessary restudy requirements pursuant to Sections 5.3.7.5 or 5.3.9.

5.3.3 Allocation of Study Costs for DISIS Cluster.

DESC shall determine each Interconnection Customer's share of the costs of completing the DISIS (including general queue administration costs and overheads) by allocating: (1) ten percent (10%) of the applicable study costs to Interconnection Customers on a per capita basis based on the number of Interconnection Requests included in the applicable Cluster; and (2) ninety percent (90%) of the applicable study costs to Interconnection Customers on a pro-rata basis based on requested megawatts included in the applicable Cluster. If an Interconnection Customer exits the Cluster prior to DESC commencing Phase 2 pursuant to Section 5.3.7.3 (including where DESC determines through Phase 1 that a distribution-level System Impact Study should be completed for one or more distribution-level Interconnection Customers in lieu of being evaluated through Phase

2), then DESC shall determine each Interconnection Customer's costs of preparing for and completing the DISIS prior to commencing Phase 2 and shall then separately determine each remaining Interconnection Customer's costs for the remainder of the DISIS.

If a Phase 3 restudy or general restudy is required pursuant to Section 5.3.7.5 or 5.3.9, then DESC shall allocate the costs of the restudy as provided for in this section amongst the Interconnection Customers included in the restudy. If an Interconnection Customer proposes non-material changes to its Interconnection Request requiring limited restudy, the costs of the limited restudy shall be directly assigned to the requesting Interconnection Customer. Facilities Study costs shall be directly assigned to the Interconnection Customer associated with such study.

5.3.4 Allocation of Interconnection Facilities and Upgrade Costs Within DISIS Cluster.

DESC shall calculate each Interconnection Customer's share of System Upgrades and Interconnection Facilities costs in the following manner:

- a) Interconnection Upgrades associated with switching stations or substations shall be allocated based on the number of Generating Facilities interconnecting at an individual station on a per capita basis (i.e. on a per Interconnection Request basis). If multiple Interconnection Customers are connecting to DESC's System through shared Interconnection Facilities, those Interconnection Customers shall be considered one Interconnection Customer for the per capita calculation described in the preceding sentence. Shared Interconnection Facilities shall be allocated based on the number of Generating Facilities sharing the Interconnection Facilities on a per capita basis.
- b) All Network Upgrades other than those identified in Subsection 5.3.4.a shall be allocated based on the proportional impact of each individual Generating Facility on such Network Upgrades. The proportional impact of such Network Upgrades shall be calculated as follows. All transmission lines and transformers identified as Network Upgrades shall be allocated using distribution factor analysis. Voltage support related Upgrades shall be allocated using a voltage impact analysis that identifies each Generating Facility's contribution to the voltage violation.

System Upgrades associated with upgrading existing breakers due to short circuit current exceeding breaker capability shall be allocated proportionally based on the short circuit current contribution of each Interconnection Request.

- c) Costs of Distribution Upgrades shall be allocated or assigned to each Interconnection Customer based upon the proportional impact of each individual Generating Facility based upon the need for the Distribution Upgrade. Distribution line work (e.g., reconductoring) shall be allocated to those Generating Facilities contributing to the need for the Upgrade on a per MW basis, based upon location (% of Upgrade). All other Distribution Upgrade costs shall be allocated on a per capita basis (i.e. on a per Interconnection Request basis) based upon the number of projects on the feeder or substation contributing to the need for the Upgrade.
- d) Costs of Interconnection Facilities are directly assigned to the Interconnection Customer(s) using such facilities.

5.3.5 Execution of Definitive Interconnection System Impact Study Agreement.

Unless otherwise agreed, pursuant to the Scoping Meeting provided for in Section 5.2, within thirty (30) Calendar Days of DESC's acknowledgement of a valid Interconnection Request requesting that a Definitive Interconnection System Impact Study be performed, DESC shall provide to the Interconnection Customer a DISIS Agreement in the form of Attachment 4 to this Appendix. At least seven (7) Calendar Days before the close of a Customer Engagement Window, DESC shall provide to each Interconnection Customer proposing to enter the DISIS Cluster a non-binding updated good-faith estimate of the cost and timeframe for completing the Definitive Interconnection System Impact Study.

The Interconnection Customer shall execute the DISIS Agreement and deliver the executed DISIS Agreement to DESC no later than the close of the Customer Engagement Window or its Interconnection Request shall be withdrawn.

5.3.6 Scope of Definitive Interconnection System Impact Study (DISIS).

The DISIS shall evaluate the impact of the proposed Interconnection Requests in the Cluster on the reliability of DESC's System. The

DISIS will consider DESC's Base Case as well as all Generating Facilities (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued requests) that, on the date the DISIS Request Window closes: (i) are existing and directly interconnected to DESC's System; (ii) are existing and interconnected to Affected Systems and may have an impact on the Interconnection Request; and (iii) have a pending Interconnection Request to interconnect to DESC's System with a higher Queue Position than the DISIS Cluster, either individually under Section 3.1 or included in a higher queued Cluster Study.

As set forth in Section 5.3.7, the DISIS is a phased study in which Phase 1 consists of a power flow and voltage analysis that is followed in Phase 2 by a short circuit analysis and a stability analysis. Any DISIS restudies (Phase 3) may consist of any one or combination of the following, as needed: (i) a power flow/voltage analysis, (ii) a short circuit analysis, and/or (iii) a stability analysis. The DISIS report(s) shall state the assumptions upon which it is based; state the results of the analyses; and provide the requirements or potential impediments to providing the requested interconnections, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The DISIS report(s) shall provide a list of facilities that are required as a result of the Interconnection Request and a non-binding good-faith preliminary estimate of the required Upgrades, including cost responsibility for Interconnection Customers in the Cluster, and a non-binding good-faith estimated time to construct.

For purposes of clustering Interconnection Requests, DESC may make reasonable changes to the requested Point(s) of Interconnection as part of the DISIS to facilitate the efficient and reliable interconnection of Interconnection Customers at common points of interconnection. DESC shall notify Interconnection Customers in writing of any intended changes to the requested Point(s) of Interconnection and the Point(s) of Interconnection shall only change upon mutual agreement. Where the Interconnection Customer agrees to DESC's proposed change to the Point of Interconnection and the change results in a loss of site control, the Interconnection Customer shall have 150 Calendar Days to provide affirmation and reasonable documentation, if requested by DESC, that site control to the new Point of Interconnection has been obtained or the Interconnection Customer shall be required to post the

additional financial security required by Section 5.3.11 to continue to proceed through the Definitive Interconnection Study process.

Where an Interconnection Customer is proposing to interconnect a Generating Facility to DESC's Distribution System and is determined through Phase 1 not to cause or contribute to the need for Network Upgrades requiring further study in Phase 2, DESC shall complete a distribution level System Impact Study, as further discussed in Section 5.3.7.1 below.

5.3.7 DISIS Procedures.

The following provides an overview and timeline of the Definitive Interconnection Study Process, including the phases and milestones associated with the DISIS.

5.3.7.1 The DISIS Cluster shall consist of all eligible Interconnection Requests that have satisfied M1 (or provided financial security in lieu of M1), have executed a DISIS Agreement, and have provided all required information before the close of the Customer Engagement Window. DESC shall use reasonable efforts to complete the Phase 1 study consisting of a power flow and voltage analysis within one hundred twenty (120) Calendar Days. The Phase 1 Report shall identify the Interconnection Facilities and System Upgrades that are expected to be required as a result of the Interconnection Request(s) and a non-binding good-faith indicative level estimate of cost responsibility and a non-binding good-faith estimated time to construct. After issuing the DISIS Phase 1 Report, DESC shall hold a second thirty (30) Calendar Day Customer Engagement Window and will host a meeting for the remaining Interconnection Customers (the Phase 1 Report Meeting) within ten (10) Business Days of publishing the DISIS Phase 1 results on a DESC sponsored website.

Where DESC determines through the initial Phase 1 study that a distribution-level Interconnection Customer will not cause or contribute to the need for Network Upgrades, DESC shall notify the Interconnection Customer in writing during the post-Phase 1 Customer Engagement Window that DESC shall make reasonable efforts to complete an individual Distribution-level

System Impact Study for the proposed Generating Facility within fifty (50) Business Days. Upon issuance of the individual distribution-level System Impact Study report, the Interconnection Customer would then proceed immediately to the SCGIP Section 4.4 Facilities Study process. Interconnection Customers that are studied for distribution level impacts only must continue to meet all Readiness Milestone requirements (or provide security in lieu of the Readiness Milestone) to proceed to Facilities Study under SCGIP Section 4.4.

- 5.3.7.2 Within twenty (20) Calendar Days of the Phase 1 Report Meeting, all Interconnection Customers electing to proceed to Phase 2 are required to satisfy the requirements of Readiness Milestone 2 (M2). Interconnection Customers that do not provide the Readiness Milestone (or provide additional security in lieu of the Readiness Milestone) by the required date shall withdraw or be deemed withdrawn by DESC and are subject to a Withdrawal Penalty pursuant to Section 5.7.3.
- 5.3.7.3 Interconnection Customers who satisfy the M2 Readiness Milestone or provide the required security to DESC shall continue to Phase 2 of the DISIS. Phase 2 consists of an updated power flow/voltage analysis (if necessary), stability analysis and short circuit analysis for the remaining Interconnection Customers. DESC shall use reasonable efforts to complete the Phase 2 analysis within one hundred fifty (150) Calendar Days. The results of this analysis shall identify the Interconnection Facilities and Network Upgrades expected to be required to reliably interconnect the Generating Facilities. The Phase 2 Report shall provide non-binding estimates of the costs of required System Upgrades and Interconnection Facilities allocated to each Interconnection Customer. DESC shall hold a third thirty (30) Calendar Day Customer Engagement Window and will host a meeting for the remaining Interconnection Customers (Phase 2 Report Meeting) within ten (10)

Business Days of publishing the DISIS Phase 2 Report on a DESC sponsored website.

- 5.3.7.4 Within twenty (20) Calendar Days of the Phase 2 Report Meeting, each Interconnection Customer shall notify DESC in writing whether it intends to proceed to the SCGIP Section 4.4 Facilities Study, where failure to provide the required notice shall result in the Interconnection Request being withdrawn by the Interconnection Customer or deemed withdrawn by DESC and the Interconnection Customer being subject to a Withdrawal Penalty pursuant to Section 5.7.3.
- i. If no Interconnection Customers withdraw, the Definitive Interconnection Study Process shall advance to the SCGIP Section 4.4 Facilities Study stage. DESC shall notify the Interconnection Customers in writing that Phase 3 is not required and simultaneously provide each Interconnection Customer the Facilities Study Agreement in the form of SCGIP Attachment 9.
 - ii. If one or more Interconnection Customer(s) withdraws, DESC shall determine if a full System Impact restudy is necessary. If DESC determines that a restudy is not necessary and Phase 3 is not required, DESC shall provide an updated Phase 2 Report within thirty (30) Calendar Days of such determination and the Definitive Interconnection Study Process shall advance to the SCGIP Section 4.4 Facilities Study. When the updated Phase 2 Report is issued, DESC shall notify remaining Interconnection Customers, in writing, that Phase 3 is not required and shall provide each of those Interconnection Customers the Facilities Study Agreement in the form of SCGIP Attachment 9.
 - iii. If one or more Interconnection Customers withdraws from the Cluster and DESC determines that a full System Impact restudy is necessary, DESC will continue with such study under Phase 3 (5.3.7.5) until DESC determines that no further restudies are required. If an Interconnection Customer withdraws after the Phase 3 restudy

described in Section 5.3.7.5 or during the Facilities Study stage and DESC determines that System Impact restudies are necessary, the Cluster shall be restudied under the terms of Phase 3. DESC shall notify each remaining Interconnection Customer, in writing, that a restudy is required.

- 5.3.7.5 If required by DESC under Section 5.3.7.4, Interconnection Customers shall continue with Phase 3 of the DISIS. Phase 3 may consist of any one or combination of the following, as needed, for the Interconnection Customers remaining in the Cluster: (i) a power flow/voltage analysis, (ii) a short circuit analysis, and/or (iii) a stability analysis. DESC shall use reasonable efforts to complete the Phase 3 analysis within one hundred fifty (150) Calendar Days.
- i. The results of this analysis shall identify the Interconnection Facilities and Network Upgrades expected to be required to reliably interconnect the Generating Facilities. The Phase 3 Report shall provide non-binding estimates of the costs of required System Upgrades and Interconnection Facilities allocated to each Interconnection Customer.
 - ii. DESC shall hold a fourth thirty (30) Calendar Day Customer Engagement Window and will host a meeting for the remaining Interconnection Customers (Phase 3 Report Meeting) within ten (10) Business Days of publishing the DISIS Phase 3 results on a DESC sponsored website. DESC shall notify remaining Interconnection Customers in the Cluster in writing when no further restudies are required and provide the Interconnection Customer(s) a Facilities Study Agreement in the form of SCGIP Attachment 9.
 - iii. If additional restudies are required before moving to Interconnection Facilities Study below, within twenty (20) Calendar Days of the Phase 3 Report Meeting (or updated Phase 3 Report Meeting), all Interconnection Customers are required to provide an updated M3 as described in Section 5.3.10.

Interconnection Customers that do not provide the Readiness Milestone (or provide security in lieu of the Readiness Milestone) by the required date shall be deemed withdrawn from the Queue pursuant to Section 5.7.3. DESC shall notify Interconnection Customers in the Cluster in writing when no further restudies are required and simultaneously provide the Interconnection Facilities Study Agreement in the form of SCGIP Attachment 9.

5.3.7.6 Within thirty (30) Calendar Days of receiving a Facility Study Agreement, each Interconnection Customer within the Cluster that has completed the DISIS process is required to (i) return an executed Facilities Study Agreement in the form of SCGIP Attachment 9 (executed and including all required data identified therein); and (ii) provide Readiness Milestone 3 (M3) (or provide additional security in lieu of the Readiness Milestone) as described in Section 5.3.10. Interconnection Customers that do not provide the executed Facilities Study Agreement and Readiness Milestone (or provide security in lieu of the Readiness Milestone) by the required date shall withdraw or be deemed withdrawn by DESC and are subject to a Withdrawal Penalty pursuant to Section 5.7.3.

5.3.7.7 At the request of an Interconnection Customer or at any time DESC determines that it will not meet the indicated timeframe for completing the DISIS, DESC shall notify Interconnection Customer(s) in writing as to the schedule status of the DISIS. If DESC is unable to complete the DISIS within the time period, it shall notify Interconnection Customer(s) and provide an estimated completion date with an explanation of the reasons why additional time is required.

5.3.8 Post-DISIS Report Meeting.

Within ten (10) Business Days of furnishing a final DISIS study report to Interconnection Customer(s) within the Cluster and posting the report on DESC's website, DESC shall convene an open meeting to discuss the study results. DESC shall, upon request, also make itself

available to meet with individual Interconnection Customers after the study report is provided.

5.3.9 Restudy.

If restudy of the DISIS other than the restudy described above in Section 5.3.7.4 is required due to a higher or equal priority queued project dropping out of the Queue, or due to modification of an earlier queued project subject to SCGIP Section 1.6, DESC shall notify the Interconnection Customer(s) within the Cluster in writing. DESC shall make reasonable efforts to ensure such restudy takes no longer than one hundred fifty (150) Calendar Days from the date of notice. Any cost of restudy shall be borne by Interconnection Customer(s) being restudied.

5.3.10 Readiness Milestones.

Satisfaction of the requirements of Readiness Milestones 1, 2 and 3 are required as applicable throughout the Definitive Interconnection Study Process to demonstrate the readiness of the Interconnection Customer to develop the Generating Facility. Satisfaction of the requirements of Readiness Milestone 4 is required after the Definitive Interconnection Study Process has concluded, but before the Interconnection Agreement is issued by DESC to the Interconnection Customer. An Interconnection Customer who does not satisfy the requirements of an applicable Readiness Milestone (or provide additional security in lieu thereof) shall be deemed withdrawn from the Queue and are subject to payment of a Withdrawal Penalty pursuant to Section 5.7.3.

5.3.10.1 Readiness Milestone 1 (M1).

M1 is satisfied by the Interconnection Customer providing evidence of one of the options below. M1 may also be satisfied by providing additional security as described in Section 5.3.11 in lieu of demonstrating readiness.

- a) Executed term sheet (or comparable evidence of a legally enforceable obligation) related to a contract, binding upon the parties to the contract, for sale of the Generating Facility's energy, where the term of the sale is not less than five (5) years, or

- b) Reasonable evidence the project has been selected by DESC in a Resource Plan or is offering to sell its output through a Resource Solicitation Process.

5.3.10.2 Readiness Milestone 2 (M2).

M2 is satisfied by the Interconnection Customer providing evidence of one of the options below. M2 may also be satisfied by providing additional security as described in Section 5.3.11 in lieu of demonstrating readiness.

- a) Executed term sheet (or comparable evidence of a legally enforceable obligation) related to a contract, binding upon the parties to the contract, for sale of the Generating Facility's energy, where the term of the sale is not less than five (5) years; or.
- b) Reasonable evidence that the project has been selected by DESC in a Resource Plan or is offering to sell its output through Resource Solicitation Process.

5.3.10.3 Readiness Milestone 3 (M3).

M3 is satisfied by the Interconnection Customer providing evidence of one of the options below. M3 may also be satisfied by providing additional security as described in Section 5.3.11 in lieu of demonstrating readiness.

- a) Executed contract, binding upon the parties to the contract, for the sale of the Generating Facility's energy, where the term of the sale is not less than five (5) years, or where the Interconnection Customer has initiated dispute resolution regarding DESC's failure to provide an executable contract or to execute the contract tendered by the Interconnection Customer and, in such circumstances, the Interconnection Customer shall have twenty (20) Calendar Days to execute a mutually-agreeable power purchase agreement or to file a formal complaint with the Commission; or

- b) Reasonable evidence that the project has been selected by DESC in a Resource Plan and, if required, has filed an application for a Certificate of Public Convenience and Necessity from the Commission or has received a contract award in a Resource Solicitation Process; or
- c) Reasonable evidence that the Interconnection Customer's Generating Facility has been included in a submitted application meeting all eligibility requirements to participate in a voluntary renewable energy program approved by the Commission pursuant to S.C. Code Section 58-41-30.

5.3.10.4 Readiness Milestone 4 (M4).

M4 must be achieved within ten (10) Business Days of DESC's issuance of the Facilities Study Report and is satisfied by the Interconnection Customer providing the prepayment amount as described below and evidence of one of the options below. M4 may also be satisfied by providing additional security as described in Section 5.3.11 in lieu of demonstrating readiness.

- a) Executed contract, binding upon the parties to the contract, for the sale of the Generating Facility's energy, where the term of the sale is not less than five (5) years; or
- b) Reasonable evidence that the project has been selected by DESC in a Resource Plan and, if required, has received a Certificate of Public Convenience and Necessity from the Commission or has received a contract award in a Resource Solicitation Process.

The M4 prepayment amount shall be the greater of:

- a) one hundred percent (100%) of the System Upgrade costs identified in the Facilities Study Report that would be borne by the Interconnection Customer under a future Interconnection Agreement; or

- b) a minimum deposit based upon the Interconnection Customer's requested Maximum Generating Capacity as identified in the Interconnection Request of:

\$100,000 for Interconnection Customers greater than 1 MW up to 5 MW;

\$150,000 for Interconnection Customers greater than 5 MW up to 10 MW;

\$200,000 for Interconnection Customers greater than 10 MW up to 20 MW;

\$500,000 for Interconnection Customers greater than 20 MW up to 50 MW, or

\$800,000 for Interconnection Customers greater than 50 MW.

If the Interconnection Customer is assigned System Upgrades in the Facilities Study Report, M4 shall be held by DESC as a non-refundable pre-payment for the estimated cost of such System Upgrades and shall be reconciled by DESC in the detailed estimated Upgrade charges included in a future Interconnection Agreement or shall be forfeited to DESC to construct the assigned System Upgrades if the Interconnection Request is subsequently withdrawn by the Interconnection Customer subject to the cap established for ready projects in Section 5.7.3.1. The M4 prepayment amount may be in the form of an irrevocable letter of credit upon which DESC may draw, cash, surety bond or other financial arrangement that is acceptable to DESC.

5.3.11 Definitive Interconnection Study Process Security Requirements.

The security required in lieu of demonstrating readiness at each Readiness Milestone is identified below. The security amount is dependent on whether the Interconnection Customer satisfied a Readiness Milestone and which phase of the Definitive Interconnection Study Process the customer is entering. All security described below for Readiness Milestones M1-M3 shall be in the form of an irrevocable letter of credit upon which DESC may draw or cash.

The M4 Security may be in the same form as the M1-M3 Security or may also be in the form of a surety bond or other financial arrangement that is acceptable to DESC.

An Interconnection Customer may opt to provide security in lieu of satisfying the requirements of Readiness Milestones M1 - M4, as described in Section 5.3.10. The security provided is applied towards the security amount required for each successive milestone if the Interconnection Customer does not withdraw. For example, the security provided for M2 is applied to the additional amount of security required for M3.

The amount of security required for each Readiness Milestone for Interconnection Customers that do not provide a demonstration of readiness is:

M1 and M2 = 2 times the Section 2.1 study deposit amount

M3 = 3 times the Section 2.1 study deposit amount

M4 = Greater of System Upgrade costs identified in the Interconnection Customer's Facilities Study Report or a minimum deposit amount equal to the minimum deposit required for ready projects in Section 5.3.10.4.

If an Interconnection Customer is initially required to provide increased financial security under this Section 5.3.11 because it cannot satisfy the requirements of a Readiness Milestone under Section 5.3.10, but subsequently does satisfy those requirements prior to the next Readiness Milestone, its security shall be reduced accordingly.

5.4 Facilities Study Timeline.

5.4.1 Where DESC administers a Definitive Interconnection Study Process and is completing a Facilities Study for all Interconnection Customers within a Cluster or Resource Solicitation Cluster, DESC shall use reasonable efforts to complete the Facilities Study within one hundred fifty (150) Calendar Days for all Interconnection Customers within the Cluster.

5.5 Interconnection Agreement and Scheduling.

5.5.1 DESC and the Interconnection Customer shall follow the SCGIP Section 5 Interconnection Agreement and Scheduling processes. All

Interconnection Customers must also satisfy the requirements of Readiness Milestone 4 (M4) within ten (10) Business Days of receipt of the Facilities Study Report. Interconnection Customers that do not provide M4 (or provide security in lieu of the Readiness Milestone by the required date) shall withdraw or be deemed withdrawn by DESC and subject to a Withdrawal Penalty pursuant to Section 5.7.3.

5.6 Processing Interconnection Request During Pending Dispute.

5.6.1 Where an Interconnection Customer initiates a dispute pursuant to SCGIP Section 6.2 after entering the Definitive Interconnection Study Process, the disputing Interconnection Customer shall have the option to either withdraw from the Cluster and be studied as part of the next Cluster or to continue being evaluated as part of the Cluster provided that it complies with all requirements of the Definitive Interconnection Study Process, including continuing to demonstrate readiness or provide financial security pursuant to Section 5.3.10 and 5.3.11.

5.7 Withdrawal of An Interconnection Request.

5.7.1 As described in SCGIP 6.3.1, an Interconnection Customer may withdraw an Interconnection Request at any time prior to executing an Interconnection Agreement by providing DESC with a written request for withdrawal, and, as described in SCGIP 6.3.2, an Interconnection Request shall be deemed withdrawn if the Interconnection Customer fails to meet its obligations specified in the Interconnection Procedures, System Impact Study Agreement or Facility Study Agreement or to take advantage of any express opportunity to cure.

5.7.2 Where an Interconnection Customer requests withdrawal during the Definitive Interconnection Study Process, DESC shall follow the process established in SCGIP 6.3.3. and shall (i) impose the Withdrawal Penalty described in Section 5.7.3, and (ii), refund any of the refundable portion of Interconnection Customer's study deposit that exceeds the share of the costs assigned to the Interconnection Customer that Utility has incurred after settling the final invoice pursuant to SCGIP Section 6.3.3. If an invoice is not paid within the timeframe provided in SCGIP Section 6.3.3, DESC shall draw upon the security provided to settle all accounts, which shall include any offsets of amounts due and owing by DESC. After the final invoice is paid and all accounts are settled, DESC shall refund or release all remaining security.

5.7.3 Withdrawal Penalty.

- a. An Interconnection Customer shall be subject to a Withdrawal Penalty if it withdraws its Interconnection Request or the Generating Facility does not otherwise reach Commercial Operation unless DESC determines consistent with Good Utility Practice that (1) the withdrawal does not negatively affect the timing or cost to interconnect of equal or lower queued projects; or (2) the cost responsibility identified for that Interconnection Customer in the current study report associated with -Network Upgrades to the DESC system increased by more than twenty-five percent (25%) compared to the costs identified in the previous report; or (3) if the Interconnection Customer withdraws after the Interconnection Facilities Study report is published and before providing the final Milestone Payment, and the cost responsibility for that Interconnection Customer identified in the Interconnection Facilities Study report increases by more than one hundred percent (100%) compared to the prior report.

5.7.3.1 Calculation of the Withdrawal Penalty for Ready Projects.

If the Interconnection Customer satisfied the Readiness Milestone requirements for the most recent phase of the Definitive Interconnection Study Process prior to withdrawal, that Interconnection Customer's Withdrawal Penalty shall be calculated as follows:

1. If the Interconnection Customer withdraws after M1, but before M2, the Withdrawal Penalty shall be equal to the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process.
2. If the Interconnection Customer withdraws after M2, but before M4, the Withdrawal Penalty shall be the higher of the study deposit or one (1) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process.
3. If the Interconnection Customer withdraws after proceeding to Section 5 and providing M4, the Withdrawal Penalty shall be the higher of the non-refundable pre-payment for the estimated System

Upgrades allocated to the Interconnection Customer in the Facilities Study Report or five (5) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process. This amount shall be capped at two (2) million dollars.

4. If the M4 prepayment amount provided by the Interconnection Customer exceeded the cap, DESC shall not be obligated to proceed with constructing the Upgrades assigned to the withdrawing Interconnection Customer and shall refund the prepayment amounts exceeding the capped Withdrawal Penalty to the withdrawing Interconnection Customer and shall allocate the Withdrawal Penalty in accordance with Section 5.7.4 in lieu of constructing the System Upgrade(s) assigned to the withdrawing Interconnection Customer.

5.7.3.2 Calculation of the Withdrawal Penalty for Non-Ready Projects.

If the Interconnection Customer did not satisfy the Readiness Milestone requirements for the most recent phase of the Definitive Interconnection Study Process prior to withdrawal and instead provided financial security pursuant to Section 5.3.11 in lieu of demonstrating readiness, that Interconnection Customer's Withdrawal Penalty shall be dependent on the Phase in which the Interconnection Customer withdraws and shall be calculated as follows:

1. If the Interconnection Customer withdraws in Phase 1 (after M1, but before M2), the Withdrawal Penalty shall be the higher of the study deposit or two (2) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process. This amount shall be capped at one (1) million dollars.
2. If the Interconnection Customer withdraws in Phase 2 (after M2, but before M3), the Withdrawal Penalty shall be the higher of the study deposit or

two (2) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process. This amount shall be capped at one and one half (1.5) million dollars.

3. If the Interconnection Customer withdraws after proceeding to the Section 4.4 Facilities Study (after M3, but before M4), the Withdrawal Penalty shall be the higher of the study deposit or three (3) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process. This amount shall be capped at two (2) million dollars.
4. If the Interconnection Customer withdraws after proceeding to Section 5 and providing M4, the Withdrawal Penalty shall be the higher of the non-refundable pre-payment for the estimated System Upgrades allocated to the Interconnection Customer in the Facilities Study Report or five (5) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process. There is no cap on the M4 Withdrawal Penalty amount for non-ready projects.

5.7.3.3 Calculation of the Withdrawal Penalty for Projects with Executed Interconnection Agreements.

The Withdrawal Penalty for any Interconnection Customer that has executed an Interconnection Agreement pursuant to SCGIP Section 5.2.1 is the higher of System Upgrade costs assigned to the Interconnection Customer under its executed Interconnection Agreement or five (5) times the Interconnection Customer's actual allocated cost of the Definitive Interconnection Study Process. There is no cap on this Withdrawal Penalty amount.

5.7.4 Distribution of Withdrawal Penalty.

Withdrawal Penalty revenues associated with M1-M3 shall be used to fund generation interconnection studies. Withdrawal Penalty revenues shall first be applied, in the form of a bill credit, to not-yet-invoiced study costs for other Interconnection Customers in the same

Cluster. To the extent that such studies are fully credited, the penalty revenues shall be applied to DESC's general queue administration costs and the costs of future Clusters in queue order. Withdrawn Interconnection Customers shall not receive a bill credit associated with Withdrawal Penalties. Distribution of Withdrawal Penalty revenues to a specific study shall not exceed the total actual study costs. Withdrawal Penalty revenues within a Cluster shall be allocated in a manner comparable to the allocation of study costs described in Section 5.3.3. Specifically, the Withdrawal Penalty revenue distribution to each Interconnection Customer in a specific Cluster, shall be (1) ten percent (10%) on a per capita basis based on the number of Interconnection Requests in the applicable Cluster; and (2) ninety percent (90%) on a pro-rata basis based on requested megawatts included in the applicable Cluster. Where an Interconnection Customer withdraws after achieving the M4 readiness milestone and its assigned System Upgrades exceed the M4 cap amount in Section 5.7.3.1, DESC shall also follow the process prescribed in this Section for allocating Withdrawal Penalty revenues. DESC shall not change the distribution of Withdrawal Penalty revenues without authorization by the Commission.

Attachment 1**Glossary of Terms (Definitive Interconnection Study Process Supplement)**

Base Case – The base case power flow, short circuit, and stability data bases used by DESC for completing interconnection studies for the Interconnection Customer.

Calendar Days – Sunday through Saturday, including all holidays.

Cluster – A group of Interconnection Requests (one or more) that are studied together for the purpose of conducting the Interconnection Studies.

Cluster Study – An interconnection study evaluating one or more Interconnection Requests.

Clustering – The process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the System Impact Study.

Definitive Interconnection Study Process (Definitive Interconnection Study)

– An alternative interconnection study process adopted by DESC, after notice and Commission approval, for purposes of administering a Cluster Study process. The Definitive Interconnection Study Process is inclusive of the DISIS Request Window, Customer Engagement Window, Definitive Interconnection System Impact Study, and the Interconnection Facilities Study.

Definitive Interconnection System Impact Study (DISIS) – An engineering study that evaluates the impact of a Cluster of Interconnection Requests on the safety and reliability of DESC's System and, if applicable, an Affected System.

Definitive Interconnection System Impact Study Agreement (DISIS Agreement) – Form of System Impact Study agreement contained in Attachment 4 for conducting the Definitive Interconnection System Impact Study.

Definitive Interconnection System Impact Study Cluster (DISIS Cluster) – A Cluster studied through a DISIS.

DISIS Request Window – A one hundred fifty (150) Calendar Days window during which DESC will receive Interconnection Requests for its Definitive Interconnection Study Process.

DISIS Verification Period – A thirty (30) Calendar Day verification period following the DISIS Request Window during which DESC shall work with applicable

Interconnection Customers to ensure all the relevant data and information has been received.

Material Modification – A modification to machine data or equipment configuration or to the interconnection site of the Generating Facility that has a material impact on the cost, timing or design of any Interconnection Facilities or Upgrades. Material Modifications include project revisions proposed at any time after receiving notification by DESC of a complete Interconnection Request pursuant to Section 1.3.3 that 1) alters the size or output characteristics of the Generating Facility from its Utility-approved Interconnection Request submission; 2) may adversely impact other Interconnection Requests with higher Queue Numbers, or may adversely impact another Interconnection Customer who is part of the same Cluster where DESC is implementing the Definitive Interconnection Study Process.

In addition to the list of modifications to an Interconnection Request identified in the SCGIP that are not indicia of a Material Modification, a change in the point of interconnection to a new location or new voltage level, where requested by DESC and agreed to by the Interconnection Customer pursuant to Section 5.3.6, is not a Material Modification.

Maximum Generating Capacity – The term shall mean the maximum continuous electrical output of the Generating Facility at any time at a power factor of approximately unity as measured at the Point of Interconnection and the maximum kW delivered to the Utility during any metering period (this output may also be referred to as the “Maximum Physical Export Capability”). Requested Maximum Generating Capacity will be specified by the Interconnection Customer in the Interconnection Request and an approved Maximum Generating Capacity will subsequently be included as a limitation in the Interconnection Agreement.

Readiness Milestone – A point in a Definitive Interconnection Study Process at which the Interconnection Customer must satisfy certain requirements set forth in Section 5.3.10 of this Appendix or be subject to increased withdrawal penalties and security.

Resource Plan – An integrated resource plan filed by DESC with the Commission pursuant to S.C. Code Ann. § 58-37-40.

Resource Solicitation Cluster – A Cluster Study associated with a Resource Plan, Competitive Resource Solicitation or related process.

South Carolina Generator Interconnection Procedures – The term “South Carolina Generator Interconnection Procedures” shall refer to the South Carolina Generator Interconnection Procedures, Forms, and Agreements for State-

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Jurisdictional Generator Interconnections as approved by the Public Service Commission of South Carolina.

Withdrawal Penalty – A penalty assigned (if applicable) to an Interconnection Customer that withdraws from the Definitive Interconnection Study Process. Withdrawal penalty shall have the meaning set forth in Sections 5.7.2 and 5.7.3 of this Appendix.

Attachment 2**Transitional Cluster System Impact Study Agreement**

THIS AGREEMENT is made and entered into this ____ day of _____, 20____ by and between _____, a _____ organized and existing under the laws of the State of _____, ("Interconnection Customer,") and Dominion Energy South Carolina, Inc., a Corporation existing under the laws of the State of South Carolina, ("Utility"). Interconnection Customer and Utility each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, Interconnection Customer is proposing to develop and to interconnect a Generating Facility with DESC's System or to develop a generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated _____ which is now being processed by DESC as Queue Number _____; and

WHEREAS, the Public Service Commission of South Carolina has authorized DESC to transition to a Definitive Interconnection Study Process and Interconnection Customer has a valid Queue Number as of the effective date of the Appendix DESC CS; and

WHEREAS, Section 3.2 of Appendix DESC CS of the South Carolina Generator Interconnection Procedures ("SCGIP") afford the Interconnection Customer the option to be studied under a "Transitional Cluster Study," with equal Queue Position to all other Interconnection Requests that enter the Transitional Cluster Study, prior to DESC fully implementing the Definitive Interconnection Study Process; and

WHEREAS, Interconnection Customer has requested DESC to perform such a Transitional Cluster Study as described in Section 3.2 of Appendix DESC CS to the SCGIP, which is a combined system impact Cluster Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to physically and electrically connect the Generating Facility as well as other proposed Generating Facilities that established Queue Numbers prior to the Commission's authorization for the Utility to transition to a Definitive Interconnection Study Process.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the South Carolina Generator Interconnection Procedures and Appendix DESC CS.
- 2.0 Interconnection Customer elects and the Utility shall cause to be performed a Transitional System Impact Cluster Study as described in Section 3.2 of Appendix DESC CS. By execution of this Agreement, Interconnection Customer and Utility agree to rescind any previously executed System Impact Study Agreement and to complete the System Impact Cluster Study pursuant to this Agreement.
- 3.0 The Transitional Cluster Study shall be based upon the technical information provided by the Interconnection Customer in the Interconnection Request. The Utility reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Transitional Cluster Study and Interconnection Customer shall provide such data. If the information requested by the Utility is not provided by the Interconnection Customer within a reasonable timeframe to be identified by the Utility in writing, the Utility shall provide the Interconnection Customer written notice providing an opportunity to cure such failure by 5:00 PM EST on the tenth (10th) Business Day following the posted date of such notice, where failure to provide the information requested within this period shall result in the study being terminated and the Interconnection Request being withdrawn by the Interconnection Customer or being deemed withdrawn by the Utility.
- 4.0 The Transitional Cluster Study report shall provide the following information:
 - identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
 - identification of any thermal overload or voltage limit violations resulting from the interconnection;
 - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; and
 - a description, estimated cost of, schedule for required facilities to interconnect the Generating Facility to the Utility's System and shall address the short circuit, instability, and power flow issues identified in the most recently published System Impact Study.

- 5.0 Interconnection Customer has met all requirements described in Section 3.1.2 of Appendix DESC CS within the timeframe prescribed by Section 3 to enter into the Transitional Cluster Study.
- 6.0 In addition to meeting all requirements of Section 3.2 of Appendix DESC CS to enter and proceed through the Transitional Cluster Study, Interconnection Customer shall have previously provided a deposit for the performance of Interconnection Studies at the time of its Interconnection Request. Interconnection Customer's initial deposit shall be applied towards the Utility's cost of completing the Transitional Cluster Study, and shall be supplemented, if required, pursuant to Section 3.2.1.a of Appendix DESC CS.

The Interconnection Customer shall be allocated the actual costs of the Transitional Cluster Study according to the method described in Section 5.3.3 of Appendix DESC CS. If the Interconnection Customer withdraws from the Cluster Study or otherwise does not reach Commercial Operation, the Interconnection Customer's deposit shall be reconciled for costs incurred by the Utility to complete the Transitional Cluster Study and the Withdrawal Penalty prescribed pursuant to Sections 3.2.4 and 3.2.5 of Appendix DESC CS, and the remaining deposit shall be refunded to the Interconnection Customer pursuant to the process established in SCGIP Section 6.3.3.

7.0 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of South Carolina, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

8.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

9.0 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

10.0 Waiver

- 10.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 10.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Utility. Any waiver of this Agreement shall, if requested, be provided in writing.

11.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

12.0 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

13.0 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

14.0 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its

subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

14.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Utility be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

14.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

15.0 Reservation of Rights

The Utility shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, or classifications of service, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Utility]

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

[Insert name of Interconnection Customer]

By: _____

Title: _____

Date: _____

ASSUMPTIONS USED IN CONDUCTING THE TRANSITIONAL CLUSTER STUDY

[Assumptions to be completed by Interconnection Customer and Utility]

Informational Interconnection Request Form and Study Agreement

1. The undersigned Interconnection Customer submits this request to evaluate the interconnection of its Generating Facility with Utility's Transmission System.
2. Interconnection Customer provides the following information:
 - a. Address or location of the proposed new Generating Facility site (to the extent known) or, in the case of an existing Generating Facility, the name and specific location (GIS coordinates) of the existing Generating Facility;
 - b. Nameplate Capacity (in MW) of the proposed new Generating Facility or the amount of increase in the Nameplate Capacity (in MW) of an existing Generating Facility. If applicable, also provide the following:
 - (i) Summer at _____ degrees C; and
 - (ii) Winter at _____ degrees C.
 - c. General description of the equipment configuration;
 - d. Proposed Commercial Operation Date to be studied (Day, Month, and Year);
 - e. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;
 - f. Approximate location of the proposed Point of Interconnection;
 - g. Interconnection Customer Data (set forth in Attachment A)
 - h. Primary frequency response operating range for electric storage resources.
 - i. Requested Maximum Generating Capacity (in MW); and
 - j. A Scope of Work including any additional information that may be reasonably required.
3. \$10,000 study deposit amount as specified in Section 4.3 of Appendix DESC CS.
4. This Informational Interconnection Study Request shall be submitted to the representative indicated below:

Via Email: sselectrictransmission@dominionenergy.com; or

Via Mail: Manager, Electric Transmission Support
200 Operations Way
Mail Code: J-36
Cayce, SC 29033
5. Representative of Interconnection Customer to contact:

[To be completed by Interconnection Customer]
6. This Interconnection Request is submitted by:

Name of Interconnection Customer: _____

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By (signature): _____

Name (type or print): _____

Title: _____

Date: _____

ATTACHMENT A

GENERATING FACILITY DATA FOR INFORMATIONAL INTERCONNECTION STUDY

UNIT RATINGS

kVA _____ °F _____ Voltage _____
 Power Factor _____
 Speed (RPM) _____ Connection (e.g. Wye) _____
 Short Circuit Ratio _____ Frequency, Hertz _____
 Stator Amperes at Rated kVA _____ Field Volts _____
 Max Turbine MW _____ °F _____

Primary frequency response operating range for electric storage resources.

Minimum State of Charge: _____
 Maximum State of Charge: _____

COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA

Inertia Constant, H = _____ kW sec/kVA Moment-of-Inertia,
 WR² = _____ lb. ft.²

REACTANCE DATA (PER UNIT-RATED KVA) DIRECT AXIS QUADRATURE AXIS

Synchronous – saturated	X _{dv} _____	X _{qv} _____
Synchronous – unsaturated	X _{di} _____	X _{qi} _____
Transient – saturated	X' _{dv} _____	X' _{qv} _____
Transient – unsaturated	X' _{di} _____	X' _{qi} _____
Subtransient – saturated	X'' _{dv} _____	X'' _{qv} _____
Subtransient – unsaturated	X'' _{di} _____	X'' _{qi} _____
Negative Sequence – saturated	X _{2v} _____	
Negative Sequence – unsaturated	X _{2i} _____	
Zero Sequence – saturated	X _{0v} _____	
Zero Sequence – unsaturated	X _{0i} _____	
Zero Sequence – unsaturated	X _{lm} _____	

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Leakage Reactance

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Open Circuit	T'_{do} _____	T'_{qo} _____
Three-Phase Short Circuit Transient	T'_{d3} _____	T'_q _____
Line to Line Short Circuit Transient	T'_{d1} _____	T''_q _____
	T''_d _____	
Short Circuit Subtransient	T'_{d2} _____	
Open Circuit Subtransient	T''_{do} _____	T''_{qo} _____
Line to Neutral Short Circuit Transient		

FIELD TIME CONSTANT DATA (SEC)
ARMATURE TIME CONSTANT DATA (SEC)

Three Phase Short Circuit	T_{a3} _____
Line to Line Short Circuit	T_{a2} _____
Line to Neutral Short Circuit	T_{a1} _____

NOTE: If requested information is not applicable, indicate by marking "N/A."

MW CAPABILITY AND PLANT CONFIGURATION
GENERATING FACILITY DATA ARMATURE WINDING RESISTANCE DATA (PER UNIT)

Positive	R_1 _____
Negative R_2 _____	Zero R_0 _____

Rotor Short Time Thermal Capacity $I_2^2 t =$ _____
 Field Current at Rated kVA, Armature Voltage and PF = _____ amps
 Field Current at Rated kVA and Armature Voltage, 0 PF = _____ amps
 Three Phase Armature Winding Capacitance = _____ microfarad
 Field Winding Resistance = _____ ohms _____ °C
 Armature Winding Resistance (Per Phase) = _____ ohms _____ °C

CURVES

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves.
 Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

GENERATOR STEP-UP TRANSFORMER DATA RATINGS

Capacity _____ Self-cooled/
Maximum Nameplate
_____/_____ kVA

Voltage Ratio(Generator Side/System side/Tertiary)
_____/_____/_____ kV

Winding Connections (Low V/High V/Tertiary V (Delta or Wye))
_____/_____/_____

Fixed Taps Available _____

Present Tap Setting _____

If more than one transformer stage is used to deliver the output from the proposed generator to the Transmission System, please provide the information above for each transformer or transformer type.

IMPEDANCE

Positive
 Z_1 (on self-cooled kVA rating) _____ % _____ X/R

Zero
 Z_0 (on self-cooled kVA rating) _____ % _____ X/R

EXCITATION SYSTEM DATA

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

GOVERNOR SYSTEM DATA

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

WIND GENERATORS

Number of generators to be interconnected pursuant to this Interconnection Request:

Elevation: _____ Single Phase _____ Three Phase _____

Inverter manufacturer, model name, number, and version:

List of adjustable setpoints for the protective equipment or software:

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet or other compatible formats, such as IEEE and PTI power flow models, must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device, then they shall be provided and discussed at Scoping Meeting.

INDUCTION GENERATORS

- (*) Field Volts: _____
- (*) Field Amperes: _____
- (*) Motoring Power (kW): _____
- (*) Neutral Grounding Resistor (If Applicable): _____
- (*) I_2^2t or K (Heating Time Constant): _____
- (*) Rotor Resistance: _____
- (*) Stator Resistance: _____
- (*) Stator Reactance: _____
- (*) Rotor Reactance: _____
- (*) Magnetizing Reactance: _____
- (*) Short Circuit Reactance: _____
- (*) Exciting Current: _____
- (*) Temperature Rise: _____
- (*) Frame Size: _____
- (*) Design Letter: _____
- (*) Reactive Power Required In Vars (No Load): _____
- (*) Reactive Power Required In Vars (Full Load): _____
- (*) Total Rotating Inertia, H: _____ Per Unit on KVA Base

Note: Please consult with Utility prior to submitting the Informational Interconnection Study Request to determine if the information designated by (*) is required.

INFORMATIONAL INTERCONNECTION STUDY AGREEMENT

THIS AGREEMENT is made and entered into this ____ day of _____, 20 ____ by and between _____, a _____ organized and existing under the laws of the State of _____, ("Interconnection Customer,") and Dominion Energy South Carolina, Inc., a Corporation existing under the laws of the State of South Carolina, ("Utility"). Interconnection Customer and Utility each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, Interconnection Customer is evaluating developing a Generating Facility or generating capacity addition to an existing Generating Facility proposing an interconnection with the Utility's Transmission System; and

WHEREAS, Interconnection Customer has submitted to Utility an Informational Interconnection Study Interconnection Request; and

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in South Carolina Generator Interconnection Procedures authorized by the Commission.
- 2.0 Interconnection Customer elects and Utility shall cause an Informational Interconnection Study consistent with Section 4.1 of this Appendix DESC CS to be performed.
- 3.0 The scope of the Informational Interconnection Study shall be subject to the project-related assumptions set forth in Attachment A to this Agreement.
- 4.0 The Informational Interconnection Study shall be performed solely for informational purposes and is non-binding and does not confer any rights as the Interconnection Customer must still successfully apply to interconnect to the Utility's System.
- 5.0 The Informational Interconnection Study report shall provide an analysis based on the project-related assumptions specified by Interconnection Customer in Attachment A to this Agreement, as Agreed to by the Utility. The Informational Interconnection Study shall identify Utility's Interconnection Facilities and the System Upgrades, and the estimated cost thereof that may be required to interconnect the proposed Generating Facility based upon the project-related assumptions specified by Interconnection Customer in Attachment A.
- 6.0 Interconnection Customer shall provide a deposit of ten thousand dollars (\$10,000.00) for the performance of the Informational Interconnection Study. The

Utility's good-faith estimate for the time of completion of the Informational Interconnection Study is [insert date].

- 7.0 Upon receipt of the Informational Interconnection Study, the Utility shall charge and Interconnection Customer shall pay the actual costs of the Informational Interconnection Study. The Interconnection Customer must pay any Study costs that exceed the Interconnection Request Deposit without interest within 20 Business Days of receipt of the invoice. If the deposit exceeds the invoiced fees or the Interconnection Customer's costs exceed the aggregate deposits received, the amount of funds equal to the difference will be settled in accordance with Section 6.3 of the South Carolina Generator Interconnection Procedures.

8.0 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of South Carolina, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

9.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

10.0 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

11.0 Waiver

11.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

11.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Utility. Any waiver of this Agreement shall, if requested, be provided in writing.

12.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

13.0 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

14.0 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

15.0 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Utility be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

16.0 Reservation of Rights

The Utility shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, or classifications of service, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement; provided that each Party shall have the right to protest any such filing by the other Party and

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to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Utility]

[Insert name of Interconnection Customer]

Signed: _____

Signed: _____

Name (Printed):

Name (Printed):

Title: _____

Title: _____

ATTACHMENT A

**PROJECT-RELATED ASSUMPTIONS UTILIZED IN THE INFORMATIONAL
INTERCONNECTION STUDY REPORT**

**[TO BE COMPLETED BY INTERCONNECTION CUSTOMER AND UTILITY PRIOR TO
EXECUTION]**

Attachment 4

DEFINITIVE INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

THIS AGREEMENT is made and entered into this ____ day of _____, 20 ____ by and between _____, a _____ organized and existing under the laws of the State of _____, ("Interconnection Customer,") and Dominion Energy South Carolina, Inc., a Corporation existing under the laws of the State of South Carolina, ("Utility"). Interconnection Customer and Utility each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, Interconnection Customer is proposing to develop a Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated _____ and received by the Utility on _____; and

WHEREAS, Interconnection Customer desires to interconnect the Generating Facility with the Utility's System and to deliver the full output of the Generating Facility to Utility subject to the terms of the South Carolina Generator Interconnection Procedures; and

WHEREAS, the Interconnection Customer has requested the Utility to perform a Definitive Interconnection System Impact Study to assess the impact of interconnecting the Generating Facility to the Utility's System, and of any Affected Systems; and

WHEREAS, the Interconnection Customer commits to provide certain Readiness Milestones or financial security if readiness cannot be demonstrated through the Definitive Interconnection Study process as described in Section 5 of Appendix DESC CS of the South Carolina Generator Interconnection Procedures.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the South Carolina Generator Interconnection Procedures.
- 2.0 Interconnection Customer elects and DESC shall cause to be performed a Definitive Interconnection System Impact Study consistent with Section 5 of Appendix DESC CS of the South Carolina Generator Interconnection Procedures.
- 3.0 The scope of the Definitive Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Definitive Interconnection System Impact Study shall be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 1.6 and 4.1 of the South Carolina Generator Interconnection Procedures. The Utility reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Definitive

Interconnection System Impact Study. If the information requested by the Utility is not provided by the Interconnection Customer within a reasonable timeframe to be identified by the Utility in writing, the Utility shall provide the Interconnection Customer written notice providing an opportunity to cure such failure by the close of business on the tenth (10th) Business Day following the posted date of such notice, where failure to provide the information requested within this period shall result in the study being terminated and the Interconnection Request being deemed withdrawn.

5.0 The final Definitive Interconnection System Impact Study report shall provide the following information, as appropriate:

- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- identification of any thermal overload or voltage limit violations resulting from the interconnection;
- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; and
- description and non-binding, good-faith estimated cost of facilities required to interconnect the Generating Facility to the Utility's System and to address the identified short circuit, instability, and power flow issues.

6.0 Interconnection Customer shall provide the deposit as specified in Section 2 of Appendix DESC CS of the South Carolina Generator Interconnection Procedures for the performance of the Definitive Interconnection System Impact Study. The Utility's good-faith estimate for the time of completion of the Definitive Interconnection System Impact Study (Phase 2) is [insert date].

Upon receipt of the Definition Interconnection System Impact Study results (Post Phase 3 Results), or withdrawal of the Interconnection Request, the Utility shall charge and Interconnection Customer shall pay the actual costs of the Definitive Interconnection System Impact Study, and the Withdrawal Penalty, as applicable, allocated according to Section 5.3.3 and 5.7.3 of Appendix DESC CS of the South Carolina Generator Interconnection Procedures.

Any difference between the study deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate, except as otherwise provided herein. As provided in Section 6.3.3 of the South Carolina Generator Interconnection Procedures, Interconnection Customer has twenty (20) Business Days of receipt of an invoice from DESC to pay any undisputed costs. If invoices are not paid within twenty (20) Business Days of receipt of an invoice, DESC may draw upon the security provided to settle all accounts, which shall include any offsets of amounts due and owing by DESC. After the final invoice is paid and all accounts are settled, DESC shall refund all remaining security.

7.0 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of South Carolina, without regard to its conflicts

of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

8.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

9.0 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

10.0 Waiver

10.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

10.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Utility. Any waiver of this Agreement shall, if requested, be provided in writing.

11.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

12.0 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

13.0 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable

the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

14.0 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

14.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Utility be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

14.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

15.0 Reservation of Rights

The Utility shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, or classifications of service, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Utility, if applicable]

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

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[Insert name of Interconnection Customer]

By: _____

Title: _____

Date: _____

ATTACHMENT A

ASSUMPTIONS USED IN CONDUCTING THE DISIS

[Assumptions to be completed by Interconnection Customer and Utility]